

LIST OF PUBLICATIONS OF KRISHNA BAHADUR

Bahadur, K. and Ranganayaki, S.

1. Photosynthesis of amino acids from paraformaldehyde potassium nitrate
Nature, 173, 1141(1954)
2. Studies in production of yeasts.
Proc. Natl. Acad. Sci., India, 16A, I, 24-26(1947).
3. Isolation and study of the growth of Dhar yeast which give high yield of yeast and produce very little alcohol when grown in sucrose culture as compared to *S. turbidans*, *S. cerevisiae*; Tutilis and other variety of yeasts.
Proc. Natl. Acad. Sci. India, 19A, II, 55-60(1950).
4. Study of the effect of zinc sulphate in the culture yeast as regard to the growth of yeast, alcohol-formation and acid production using sucrose and ethyl alcohol separately as the source of carbon food, under non-aerated conditions.
Proc. Natl. Acad. Sci. India, 19A II, 61-66(1950).
5. Study of the growth of Dhar yeast in ^{culture} containing ethyl alcohol as the source of carbon and different amm. salts as the source of nitrogen under non-aerated conditions.
Trans. Royal Soc. New Zealand, 82, 2, 219-221(1954).
6. The effect of ammonium sulphate of the growth of Dhar yeast cultures containing sucrose as the source of carbon.
Trans. Royal. Soc. New Zealand, 81, 4, 469-71(1954)
7. Study of the growth of Dhar yeast in cultures containing different concentrations of ethyl alcohol as the source of carbon food under non-aerated conditions.
Proc. Natl. Acad. Sci. India, 19A, II 67-70(1950).
8. A study of the influence of the concentration of sucrose and Amm. nitrate on the metabolism of Dhar yeast.
J. Sci. Res. Inst. Japan, No.1357, 48, 143-147(1954).
9. A study of the effect of fuschine red on the metabolism of yeast.
Bull. Chem. Soc. Japan, 24, no.5, 297-300(1954).
10. A study of the effect of calcium ions on the metabolism of Dhar yeast.
Bull. Acad. Royal de-Belgique. Seauca. du 2. April, 403-407.(1954)
11. A study of the influence of phosphate on the metabolism of Dhar yeast.
Bull. Acad. Royal de Belgique Seanc. du 6 Nov. 995-999(1954).
12. A study of the influence of concentration of sucrose and ammonium nitrate in the culture of Dhar yeast on its metabolism at constant carbon nitrogen 45 under non-aerated conditions.
Proc. Natl. Acad. Sci. India 23A, I, 1-7(1954).

13. A comparative study of the growth of Dhar yeast and *S. calshbergensis* in cultures containing only ethyl alcohol as source of carbon under non-aerated conditions.
Proc. Natl. Acad. Sci. India 23A, Part I, 8-12(1954).
 14. Study of the mutations in Dhar yeast affected by fuchsin red.
Proc. Natl. Acad. Sci. India, 23A, Part I, 13-20(1954).
 15. Effect of carbon nitrogen ratio on the growth and other physiological properties of Dhar yeast.
Acta.May.C.C.C.P. Maku.Russia, Tour XXIV, 2, 141-146(1955).
 16. The reactions involved in the formation of compounds preliminary to the synthesis of protoplasm and other materials of biological importance.
Report of the International Symposium on, "the origin of life on the earth" held at Moscow in Aug.1857, 91-96(1957).
 17. A study of the growth of Dhar yeast utilising the energy released by the aeration of several metals.
Zeutra bl.f. Bakteriologie, Parasiten kunde, Infektion-krankheiten U.Hygiene, II abt. 110, 309-11(1957).
 18. Isolation and morphological studies of Dhar yeast.
Ibid., 305-309 (1957).
 19. Influence of magnesium ion concentration on the metabolism of Dhar yeast.
Proc. Natl. Sci. India, 26A, I, 81-86(1957).
 20. Bahadur, K., Galand and Smith, A.E. space flight, 11, 325(1968).
 21. The role of aromatic hydrocarbons in the photosynthesis of amino acids.
J. Gen. Chem. Vol.33, Nov. 1963.
 22. A study of the influence of the change of C/N ratio on the loss of nitrogen and other physiological properties of *Pichia indica* in cultures containing area and ethyl alcohol as sources of nitrogen and carbon respectively under non-aerated conditions.
Proc. Natl. Acad. Sci. India, 27A, VI, 206-298(1958).
 23. A study of the change in physiological properties of Dhar yeast by growing it in cultures containing sucrose, ethyl alcohol or methyl alcohol as the source of carbon food.
Archiv.of. Mikrobiologie, 33, 49-51(1959).
- Bahadur, K. and Rajam, S.
24. A study of the relationship between the size of the kidney and the size of the fish.
Proc. Natl. Acad. Sci. India, 27A, 11, 87-90(1958).

Bahadur, K., Tandon, S.P. and Chauhan, J.S.

25. Study of 'The formation of free amino acids in the cell free culture and within the cells of Dhar yeast employing d,l,-alanine and sucrose as the sources of nitrogen and carbon respectively. Zeut.fur Baktariology, Parasitenkunde. Infektionskrankheiten u. Hygiene II Abt. 110, 674-75(1957).

Bahadur, K. and Sinha, R.C.

26. Influence of the concentration of papain actuated by hydrogen sulphate on the hydrolysis of casein at different temperatures and pH value 4.4. Enzymologia, Vol. XVIII, 5, 288-92(1957).
27. Fractionation of commercial papain employing precipitation by fractional saturation with ammonium sulphate. Cytologia, Vol.22, Nov.1, 53-59(1957).
28. Der einfluss der Wasserstoffion-Konzentration und der temperature auf die Milchgerinnung und Casein hydrolyse durch Papain. Zeiteschrift fur Leberamittel-Untersuchung und Forschung, 105, Band 4, Seit 319-321(1957).
29. Role of 8-hydroxy quinoline on the inhibition of enzymic activity of papain by Fe, Cu and Mn. Ind. J. Appl. Chem., 21, No.3, 111-113(1958).
30. Comparative study of the activation of papain by bisulphite and ammonium ions. Proc. Natl. Acad. Sci. India, 26A, I, 53-57(1957).
31. The influence of vitamin C in presence of Fe and Mn on the proteolytic activity of papain employing casein as the substrate. Enzymologia, 19, 125(1958).
32. Influence of heat on the inhibition of enzymic property of papain. Enzymologia, XX, 17(1958).
33. Comparative study of the proteolytic activities of papain and trypsin against, egg albumin and meat extract. Enzymologia, XIX, 319(1958).
34. Fractionation and crystallisation of commercial papain. Enzymologia, XIX, 323-26(1958).
35. Influence of the concentration of heavy metal salts on the proteolytic activity of papain. Enzymologia, XIX, 128-32(1958).

Bahadur, K. and Dube, J.N.

36. Study of 2,3-butanediol formation by *Sonatia Marcescens*. Archiv.f.Mikro., Germany, Archiv.f.Microbiol.,Bd., 32, S., 16-19(1958).

37. Study in production of 2,3-butanediol by *Serratia marcescens* from agricultural waste materials.
Indian J. Appl. Chem., Vol.22, No.3, 99-102(1959).
38. Influence of basic and acidic ions on the formation of 2,3-butanediol by *Serratia marcescens*.
Japan J. Microbiology, Vol.3, No.1, 49-52(1958).
39. Eine untersuchung uber die Bildung von 2,3-butanediol in Kulturen von *Serratia marcescens* unter Verwendung verschieden er Kohlenhydrate als Kohlestoffquelle.
Biochemische Zeitschrift, Bd. 331, S. 375-376(1959).

Bahadur, K. and Ranganayaki, S.

40. Probable reactions involved in the photosynthesis of proline, serine and other amino acids.
Comptes Rendu. France, 240, 246-8(1955).
41. A study of the influence of hydrogen ion concentration on the synthesis of amino acids from paraformaldehyde and potassium nitrate.
Proc. Natl. Acad. Sci., 23A, 21-23(1954).
42. A study of the growth of *Pichia membranaefaciens* utilising the energy obtained by the oxidation of different metallic hydroxides by aeration.
Bull. Chem. Soc. Japan, 29, No.6, 313-314(1954).
43. A study of the influence of zinc and iodide ions on the formation of amino acids in the culture of *Pichia membranaefaciens*.
Acta. micr. Sinica, III, 1, 99-102(1955).
44. Long period preservation of the Dhar Yeast in active form.
Bull. Acad. royal de Belgique Seance du 8 Oct. 429-431(1955).
45. Separation of amino acids formed photochemically from a mixture of paraformaldehyde, potassium nitrate and ferric chloride.
Proc. Natl. Acad. Sci. India, 26A, II, 154-162(1957).
46. Formation of amino acids in water containing dissolved carbon dioxide and molybdenum colloid on exposure to artificial light.
U.S.S.R. Acad. Sc., No.6, 754-55(1957).
47. Photosynthesis of amino acids from paraformaldehyde involving the fixation of nitrogen in the presence of colloidal molybdenum oxide as catalyst.
Nature, 182, 1668(1958).
48. Formation of peptide bonds in aqueous solution and aqueous line of molecular evolution.
Proc. Natl. Acad. Sci. India, 27A, Part VI, 292-95(1958).
49. Aqueous line of Molecular Evolution.
Izvestiya Akademii nauk U.S.S.R., 11, 1361-1365(1958).

50. Carbondioxide Ke pani Vilayan men amino amlon Ka prakash sanshleshan. Vigyan Parishad Anusandhan Patrika, 1, Kr.2, 99-101(1958).
51. A study of 2,3-butanediol formation in molassen culture. I. Chem. Soc., 21, No.2, 74-76(1958).
52. A study of the influence of milk, phosphate and calcium carbonate on the formation of 2,3-butanediol in Serrutia marcescens cultures. Japan, J. Microb., 2, No.2, 197-201(1958).
53. The influence of minerals on the formation of 2,3-butanediol by Aerobacter aerogenes. Archiv. fur Mikrobiologie, Bd.29, 363-367(1958).
54. Studies in 2,3-butanediol formation. Zentrablatt fur Bacteriologie, Jena, II, Abt., III, 698-70(1958).
55. A study of the influence of the concentration of molasses sugar on the formation of 2,3-butanediol in the culture of A.aerogenes and B.polymyxa. Zentral bl. Baketriologia. II. Abt., 112, 506-506(1959).
56. A study of the influence of zinc ions on the production of 2,3-butanediol by Pichia indica. Archiv.f.Mikrobiologie, Bd. 32, 309-311(1959).
57. The influence of zinc ions on the formation of 2,3-butanediol in B.Polymyxa cultures. Japan, J. Microbiol., 2, No.4, 407-409(1958).
58. The influence of iron, SO_3^- and formaldehyde on the formation of 2,3-butanediol in the cultures of B.polymyxa. Archiv. fur Mikro., Bd. 32, s.369-372(1959).

Bahadur, K. and Atreya, B.D.

59. A study of the influence of casein concentration of papain-casein reaction at different hydrogen ion concentrations and employing boric acid- and citric acid-phosphate buffers. Enzymologia, XX, 6, 327-335(1959).

Bahadur, K. and Verma, H.C.

60. Study of the influence of phosphate ions concentration on the absorption of Mg^{++} , Ca^{++} nitrogen metabolism and the yeast growth. Zetrablatt, f. Baketeriologie, II Abt., III Veb, Jena. 405-409(1958).
61. Influence of the concentration of zinc ions on the comparative absorption of metallic ions by the yeast cells and yeast growth. Proc. Natl. Acad. Sci. India, 27A, IV, 177-181(1958).

62. Influence of K^+ concentration on carbon and nitrogen consumption and Ca^{++} , Mg^{++} and PO^{+++} absorption by yeast cells.
Zentralblatt für Bacteriologie, II, Abt., 112, 34-37(1959).
63. Influence of Ca^{++} concentration on the comparative absorption of metallic ions by the yeast cells and on the yeast growth.
Cytologia, Vol.23, No.1, 9-13(1958).
64. Study of the influence of Mg^{++} on the absorption minerals, sugars and nitrogen nutrients by the yeast cells.
Zentralblatt für Bakteriologie, Jena II Abt. 112, 604-607(1959).
65. Influence of nitrogen concentration on the absorption of minerals and yeast growth in the cultures of *Pichia indica*.
Vigyan Parishad Anusandhan Patrika, Part 2, 3, 163-168 (1959).

Bahadur, K. and Kamlesh Kumari Saroj

66. Study of the influence of concentration of sucrose on the acetone-butanol fermentation by different strains of clostridium.
Proc. Natl. Acad. Sci India, 28A, Part III, 87-95(1959).

Bahadur, K. and Vishnu Chandra

67. Bahadur, K. and Vishnu Chandra, Inhibition of Urease by lead acetate.
Enzymologia, XX, 355-358(1959).

K. Bahadur

68. Investigation of the influence of concentration of carbon and nitrogen in the culture of *Pichia indica* at carbon-nitrogen ratio 20.
The Japanese Journal of Microbiology, Vol.4, No.2,
pp. 79-82, April, 1960.

K. Bahadur and S. Ranganayaki

69. Influence of certain metabolites formed during microbial dissimilation of carbohydrate on the formation of 2,3-butanediol in the cultures of *B. polymyxa*.
Bulletin De L'Academie Polonaise Des Sciences cl V-Vol.VIII,
No.10, pp. 435-39(1960).
70. The influence of aluminium oxide on the formation of 2,3-butanediol in the cultures of *Bacillus polymyxa*.
Zent.f.Bakt. II Abt. 113, pp. 215-218(1960).
71. A study of the influence of certain enzyme poisons and of compounds which hinder the various enzymic processes taking place during normal microbial dissimilation of carbohydrate on the formation of acetoin and 2,3-butanediol by *A. hydrophila*.
Zentralblattes für Bakteriologie, II Abt, 113, pp. 465-469.
(1960).

72. A study of the influence of the toxins supported by absorption on wood charcoal from the cultures of *Bacillus polymyca* on the *Antonie Van Leeuwenhoek* 26, p. 23-26(1960).

Bahadur, K. and Rajam, S.

73. An investigation of the possibilities of the use of molasses for the production of 2,3-butanediol by certain Diol forming Bacteria. *Indian J. Appl. Chem.*, 23, No.1(1960).
74. Study of phosphoric kidney of *Wallagonia* *Attiv.*
Natl. Acad. Soc. India, Vol.XXX, Part IV, 1960, 345-348.

Bahadur, K. and J.N. Dube

75. A study of the formation of pigment by *Sarratia marcessns.*
Proc. Natl. Acad. Sci. India, 28A, 5, 254-57(1959).

Bahadur, K. and Harish Varma

76. Study of the influence of sucrose concentration on the mineral assimilation of yeast.
Zbl. Bakt. Abt. II, 113, 511-514(1960).

Bahadur, K. and B.D. Atreya

77. Influence of different buffers on the hydrolytic properties of papain against casein.
Indian J. Appl. Chem., Vol.22, No.5-6, p.221(1958).
78. Effect of anthraquinone, Benzoquinone, hydroquinone and res einol on the hydrolysis of casein by papain.
Enzymologia XXI, 238-244(1960).
79. Study of the proteolysis of certain vegetable proteins by papain.
Enzymol., Vol.XXIII, 137-156(1960).
80. A study of the influence of the sequence of addition of foreign substances on the action of papain.
Invest. akad. Nauk. 745, 1960.
81. The influence of amides on the protolysis of casein by papain.
Enzymologia, XXX, 13(1959).
82. Study of the effect of ripe papaya extract on the protolytic property of papain.
Enzymologia, XXI, 325-36(1960).
83. Influence of amino acids and amines on the enzymic activity of papain.
Proc. Natl. Acad. Sci. India, 30A, II, 126-40(1961).

84. The formation of enzymoid of papain in an aqueous solution of glycine.

Proc. Natl. Acad. Sci. India, 30A, II, 141-145(1961).

K. Bahadur and Vishnu Chandra

85. Inhibition of urease by lead acetate.
Enzymol., Vol. XX, pp. 1-12(1959).
86. Decomposition of urea by urease.
Enzymol., Vol. XXI, pp. 1-12(1959).
87. A study of the decomposition of urea by the aqueous extract of Glycine soyabeans.
Enzymol., XXI, 209-215(1960).
88. Studies on the influence of stannous chloride on the decomposition of urea by soyabean urease.
Enzymol., XXII, 60-72(1960).
89. Influence of enzyme and substrate concentration on the decomposition of urea by commercial urease, and urease obtained from glycine soya in phosphate buffer.
Enzymologia, XXIII, 117-122(1961).

K. Bahadur and Kamlesh Kumari Saroj

90. Study of the influences of charcoal on the acetone butanol fermentation by different strains in clostridium.
Japanese J. of Microbiology, Vol. 4, No.1, p. 43-51(1960).
91. A study of the influence of hydrogen ion concentration of the culture media on the formation of acetone and butanol by clostrid species using sucrose as substrate in synthetic media.
Japanese J. Microbiol., Vol. 4, No.4, 341-349(1960).

K. Bahadur and Indra Kumari

92. Fractionation of papain by ethanol and investigation of the proteolytic and milk clotting properties of different enzymic fraction.
Enzymologia, Vol. XXI, 145-154(1959).
93. Fractionation of commercial papain by acetone and investigation of the proteolytic and milk clotting properties of different fractions.
Enzymologia, Vol. XXI, 114-122(1959).
94. Effect of heat on cupri papain as indicated by its milk clotting and proteolytic activities.
Enzymologia, Vol. XXI, 365-371(1960).
95. Investigation of optimum pH for the hydrolysis of casein by papain and its alcoholic fraction at 50°C.
Biochemical Application, Rare.n. 2,7,73(1955).

K. Bahadur and R.B. Srivastava

96. Photosynthesis of peptides in the aqueous solutions of aspartic acid and glycine.
Indian J. Appl. Chem., Vol.23, pp. 131-134, Nov.3, 1960.

K. Bahadur, O.N. Perti and H.D. Pathak

97. Photochemical formation of peptide bonds in aqueous solution.
Proc. Natl. Acad. Sci. India, 30A, Part II, 206-220(1961).

K. Bahadur and M.L. Agrawal

98. Influence of the source of carbon in photochemical fixation of nitrogen in aqueous mixture containing molybdic acid as the catalyst.
Proc. Natl. Acad. of Sciences, India, Sec. A., Vol. XXXII, Part I, 1962, pp. 83-87(1962).

K. Bahadur and Vishnu Chandra

99. A study of the inhibitory influence of Ag^+ , Au^{+++} and Cu^{+++} ions on the influence decomposition of urea by soyabean (Glycine soja) ureas.
Proc. Natl. Acad. Sci. India, Sec.A, Vol. XXXII, Part I, pp. 72-82(1962).

100. K. Bahadur and Srivastava, R.B.

100. The influence of catalysts and period of irradiation in the photosynthesis of amino acids in a mixture of paraformaldehyde and potassium nitrate.
Zurnal obscherikimii, Tom XXXI(XCIII), 317-320(1961).
101. Vibhinna Prakar Ke Kanch Ke Bartaro mealanine Ka Prakash Vighatan.
Vigyan Parishad Anusandhan Patrika, 5, I, 57-59(1962).

K. Bahadur and Ranganayaki, S.

102. A study of the reducing materials formed during 2:3 butanediol fermentation.
Publ. Fac. Sci. University, BRNO, Tehscoslovaquie, No.411, 95-102(1960).

Bahadur, K. and A.N. Malviya

103. Role of sugar concentration on the formation of acids in the culture media of a few strains of *Aspergillus niger*.
Zbl. Bakt., II Abt, 117, 66-69(1963).

104. Synthesis of Jeewanu, units capable of growth multiplication and metabolic activity.
Zbl. Bakt., 117, 567-602(1964).

Bahadur, K. and Agarwal, K.M.L.

105. Studies in the photochemical fixation of Nitrogen.
J. Org. Chem., U.S.S.R., 6, III, 248(1963).

Bahadur, K. and Saxena, I.

106. Study of a papain activation factor present in the dialyzable fraction of soyabean extract.
Biologin Plantanum, 6, 165(1964).

Bahadur, K. and Saxena, I.

107. Examination of the irradiated aqueous mixtures of organic compounds and inorganic salts for enzymic activity.
Vijnana Parishad Anusandhan Patrika, 6, 161-168(1963).

Bahadur, K.

108. Conversion of lifeless matter into living systems.
Zbl. Bakt., 118, 671-694(1964).

Bahadur, K. and Saxena, I.

109. Adaptability in Enzyme.
Biologia Plantarum, 7, 86(1965).

Bahadur, K. and Pandey, R.S.

110. Photochemical formation of peptide in aqueous solution containing glutamic acid, in presence of different catalysts.
J. Ind. Chem. Soc., 42, (2), 75-85(1965).

111. Photochemical formation of peptides in aqueous mixtures containing sucrose as the energy material and Molybdenic acid as catalyst.
Vijnana Parishad Anusandhan Patrika, 7, (2-3), 57-65(1964).

Bahadur, K. and Agarwal, K.M.L.

112. Study of the photochemical fixation of nitrogen in synthetic mixtures containing organic acids as source of carbon and mixtures of colloidal iron and molybdenum oxide as catalysts.
Vijnana Parishad Anusandhan Patrika, 7(2-3), 51-56(1964).

Bahadur, K., Pandey, R.S., Perti, O.N. and Pathak, H.D.

113. Origin of the living systems.
Agra Univ. J. Res.(Sci.), 13, II, 1-27 (1965).

Bahadur, K. and Agarwal, K.M.L.

114. Influence of calcium ions on growth and nitrogen fixation in cultures of nitrogen fixing micro-organism *Azobacter chroocum* strain no.120/2/1B/2B at pH values 6.5, 7.0 and 7.5.
Zbl. Bakt., 119, 245-255(1965).

Bahadur, K. and Sinha, K.K.

115. ~~Bahadur, K.~~ Study of the influence of the sodium salts of the fatty acids on the fixation of nitrogen.
Zbl. Bakt., 119 (2), 239-244(1965).

Bahadur, K. and Agarwal, K.M.L.

116. Photochemical fixation of Nitrogen in sterilised aqueous mixtures containing paraformaldehyde and inorganic catalyts.
Vijnana Parishad Anusandhan Patrika 8 (2), 43-62(1965).

Bahadur, K. and Pandey, R.S.

117. Investigation on photochemical formation of peptide in aqueous mixtures of tyrosine and leucine in presence of some organic acids or sugars.
Vijnana Parishad Anusandhan Patrika, 8 (2), 63(1965).

Bahadur, K.

118. About experiments on preparation of Jeewanu from thermal peptides.
Agra Univ. J. Res.(Sci.), 14 (1), 41-48(1966).
119. Synthesis of Jeewanu, the protocell.
Bulletin of Indian photobiology group, 4, 8-16 March, (1966).

Bahadur, K. and Saxena, I.

120. Study of the papain activation factor present in the dialyseable fraction of soyabean extract.
Biol. Plant. Acad. Sci. Bohemslor, 6, 165(1964).

Bahadur, K. and Agrawal, K.M.L.

121. Influence of Hydrogen ion concentration on the photochemical fixation of nitrogen in mixtures containing tartaric acid as source of carbon and mixtures of colloidal Molybdenum and iron oxides as catalyts.
J. Chem. Soc. U.A.R., 9(1), 67-72(1966).

Bahadur, K. and Malaviya, A.N.

122. The role of hydrogen ion concentration on the production of acids by *Aspergillus niger*.
Zbl. Bakt., 120 (2), 616-620(1966).

Bahadur, K.

123. Jeewanu, the Protocell. M/s Ram Narain Lal Beni Prasad, Allahabad, 2, (India), 1966.

Bahadur, K. and Malviya, A.N.

124. The role of period of fermentation on the production of citric acid by *Aspergillus niger*.
Zbl. Bakt., 120 (2), 121-124 (1966).
125. Dynamine role of metalions in the production of citric acid by *Aspergillus niger*.
Zbl. Bakt., 120(2), 726-731(1966).
126. The influence of mineral nutrients on the microbial production of citric acid.
Zbl. Bakt., 120 (2), 732-739 (1966).

Bahadur, K. Ranganayaki, S., Ajit Kumar and Srivastava, P.

127. Synthesis of Molecular association with the properties of biological order.
Zbl. Bakt., 120(2), 740-752(1966).

Bahadur, K. and Agarwal, K.M.L.

128. Influence of calcium ions on growth and nitrogen fixation in cultures of Nitrogen fixing organism.
Zbl. Bakt., 120(2), 703-711(1966).
129. Influence of Calcium ions on growth and nitrogen fixation in cultures of nitrogen fixing microorganism no. 121/1 at pH values 6.5, 7.0 and 7.5.
Italian J. Biochem., 15(1), 1-10(1966).

Bahadur, K. Ranganayaki, S. and Srivastava, P.

130. Solar radiation and origin of life.
Vijnana Parisad Anusandhan Patrika, 10(1), 51-61(1967).

Bahadur, K. and Ranganayaki, S.

131. New approach to molecular and chemical evolution.
Vijnana Parishad Anusandhan Patrika, 9(4), 171-182(1966).

132. Formation of Jeewanu, the molecular association with properties of biological order.
Vijnana Parisad Anusandhan Patrika, 9, 117-127(1966).

Bahadur, K.

133. Synthesis of Jeewanu, the protocell.
Zbl. Bakt., 121(2), 291-319(1967).

Bahadur, K. and Saxena, I.

134. Abiogenesis leading to biopolesis.
Trans. Rajs. Soc. New Southwales, 101(1), 11-15(1967).

Bahadur, K. and Verma, M.L.

135. Microdetermination of L. Arginine separately and in presence of other amino acids.
Micro. Chem. J., 14 (4), 547-49(1969).

Bahadur, K. and Singh, B.B.

136. Cracking in Diospyros melanoxylon wood.
Vijnana Parisad Anusandhan Patrika, 11(4), 192-194(1970).

Bahadur, K. and Malviya, A.N.

137. Studies in citric acid fermentation. Micropathologia and Mycologia applicate. 36 (3-4), 31(1968).

Bahadur, K. and Srivastava, R.L.

138. The study of the oil of Oriza sativa Waste.
Vijnana Parisad Anusandhan Patrika, 13(1), 25-30(1970).

Bahadur, K. and Ranganayaki, S.

139. Photochemical formation of self sustaining coacervates.
J. of Brit. Interplanetary Soc., 23(12), 813(1970).

Ranganayaki, S., Raina, V. and Bahadur, K.

140. Detection of nucleic acid bases in photochemically synthesised self sustaining coacervates.
J. Brit. Interplanetary Soc., 25(5), 279-286(1972).

Bahadur, K. and Srivastava, R.L.

141. Study of unsaponifiable matter of Oriza sativa Husk oil.
Planta medica, 20 (4), 340-343(1972).

Bahadur, K. and Sen, P.

142. Titrimetric determination of Asparagic acid.
Micro. Chem. J., 18, 694-698(1973).

Bahadur, K. and Billa, S.P.

143. Composition of fatty acids in the seeds of Lathyrus sativus.
Vijnana Parisad Anusandhan Patrika, 11 (4), 205-209(1968).
144. Estimation of -N Oxalyl-X, B diamino propionic acid in the seeds of Lathyrus sativus.
Indian J. App. Chem., 33(3), 168-172(1970).
145. A comparative study of water soluble reducing substances of some Indian liquiminous seed.
PLMEAA, 20(1), 50-53(1970).
146. Study of Lecithin present in the seeds of Lathyrus sativus.
Vijnana Parisad Anusandhan Patrika, 12(2), 69-71(1969).
147. Isolation and identification of phospholipid.
2, Naturforsch., 26, 1376(1971).

Billa, S.P., Bahadur, K. and Singh, B.B.

148. Determination of percentage of fatty acids in a mixture containing three fatty acids.
Ald. University Studies, Vol.3, No.4, 1971.

Bahadur, K. and Sorabji, P.

149. Ultraviolet irradiation on nitrogen fixing bacteria and determination of the inhibition constant.
Zbl. Bakt. Abst. II, 493-497(1970).

Bahadur, K. and Tripathi, P.

150. Effect of mannitol, sucrose & glucose on bacterial nitrogen fixation.
Zbl. Bakt. II Bd. 130, 3, 486-490(1975).
151. Activatory effect of some rare earths on microbial nitrogen transformation.
Zbl. Bakt. II Bd. 130, S 17-20(1975).
152. Nitrogen fixation by microbial cultures with sodium salt of organic acids as carbon source (under print).
153. Investigation of effect of inorganic and organic nitrogenous compounds in microbial nitrogen fixation with respect to the fixation cycle.
Zbl. Bakt. (under print).

Bahadur, K. and Usha Jaiswal

154. Effect of uranyl acetate on microbial fixation of nitrogen in presence of Lanthanum sulphate.
Zbl. Bakt. Abt. II Bd. 131, 8, 157-162(1976).

Bahadur, K., Verma, M.L. & Singh, Y.P.

155. Effect of concentration of amm. molybdate diammonium hydrogen phosphate, formaldehyde and mineral in mixture on the synthesis of amino acid.
Zeitschrift fur Allg. Mikro biologie 14, 2, 87-91(1974).

Bahadur, K., Sharma, S.

156. The composition of the oil Extracted from the roots of Lunaea Nudicaulis.
Proc. Natl. Acad. Sci. India, 44(a) IV, 1974.

Bahadur, K. and Sen, P.

157. Titrimetric estimation of cysteine alone and in the presence of other amino acids.
Talanta, Vol.21, pp. 970-972, 1974.
158. Comparative study of abiogenesis of cysteine and other amino acids catalysed by various metal ions.
Zeitschrift fur Allg. mikrobiologia, 15, 3, 143-47(1975).

Bahadur, K., Ranganayaki, S. and Sen, P.

159. Titrimetric microdetermination of L cysteine hydrochloride separately and in the presence of other natural amino acids.
Sydowia Annales Mycologia Ser.II, Vol.XXVI, 1-6, 1972.

Ranganayaki, S. and Srivastava, B.

160. Titration of L cysteine hydrochloride with standard Nickel sulphate solution employing L(pyridyl 2' azo) Naphthol-2 as indicator.
Microchemical journal, 18, 699-702(1973).

Bahadur, K. and Saxena, I.

161. Complexometric estimation of Glutamic acid by titration with standard cadmium acetate solution employing 4(2-thiozolyyl azo) resorcin.
Microchemical Journal, 18, 358-362(1973).

Bahadur, K. and Gupta, J.L.

162. Cytological studies of abiogenically synthesised Jeewanu, Cell like microstructures.
Zbl. fur Bakt., 127, 643-648(1972).

Bahadur, K. and Jaiswal, U.

163. Effect of Uranium on microbial nitrogen fixation.
Zbl. Bakt. Abt. II 128, 758-763(1973).

Bahadur, K.

164. Photochemical formation of self sustaining coacervates.
Zbl. Bakt. Abt. II, 130, 211-218 (1975).

~~Bahadur, K., R. K. Rastogi and H. B. Rastogi~~

Bahadur, K. and U. Jaiswal

165. Effect of selenium and molybdenum on microbial fixation of nitrogen-Vijnana Parishad Anusandhana Patrika, Allahabad, India, Vol.17, No.2, April 1974, pp. 121 to 130.

Bahadur, K. and U. Jaiswal

166. Effect of uranyl acetate on microbial fixation of nitrogen in presence of lanthanum sulphate.
Zentralblatte fur bakteriologie, Jena, Germany, Abt. II, Bd. 131, S. 157-162(1976).

Bahadur, K., S. Ranganayaki, Y.P. Singh and S. Kumar

167. Study of the response to antibiotics in Jeewanu, the self-sustaining coacervates, capable of growth, multiplication and metabolic activity.
Revista do Instituto de Antibioticos, Recife, Vol. 15N(1/2) 33-36 dez. 1975.

Ranganayaki, S., Bharti Srivastava and K. Bahadur

168. Synthesis of Amino Acids and Peptides in sterilized aqueous mixtures under different conditions.
Proc. Nat. Acad. Sci. India, 47(A), III, 182-188, 1977.

Bahadur, K. and Agarwal, K.M.L.

169. Photochemical fixation of Nitrogen in solutions containing Paraformaldehyde as a source of carbon in the presence of catalysts.
Journal of Scientific and Industrial Research 21B (7), 336-337 (1962).

Bahadur, K.

170. Photochemical Formation of Self-Sustaining Coacervates.
Proc. Indian Natn. Acad., 39, B, (4), 455-467 (1973).

Bahadur, K. and Sen, P.

171. Microdetermination of L-Histidine and L-cysteine separately and in the presence of other natural amino acids.
Analisis, 2, (2), 126-129 Fevrier (1973).

Bahadur, K., S. Kumar and P.S. Gusain

172. Effect of Tetracycline on the Formation of Nucleic Acid Bases Formed in Photochemically Synthesized Micro-Structure, called "Jeewanu".
Zbl. Bakt. II. Abt. Bd. 132, S. 666-672 (1977).

Bahadur, K. and U. Jyotishmati

173. Effect of Uranyl and Molybdate Ions on Microbial Fixation of Nitrogen.
Zbl. Bakt. Abt. II, Bd, 133 S, 157-162 (1978).
174. Microbial Fixation of Nitrogen in Presence of Sodium Tungstate.
Zbl. Bakt. II. Abt. Bd. 133, S. 623-627 (1978).
175. Microbial Fixation of Nitrogen in Presence of Lanthanum Sulphate with Sodium Molybdate.
Zbl. Bakt. II. Abt. Bd. 133, S. 632-637 (1978).

Bahadur, K. and Tripathi, P.

176. Investigation of Cerium and Yttrium Ions Effects on Microbial Fixation and Determination of Inhibition.
Zbl. Bakt. II. Abt., Bd. 133, S. 628-631 (1978).

Rao, K.K., Adams, M.W.W., Morris, P., Hall, D.O., Ranganayaki, S. and Bahadur, K.

177. Biophotolysis of water for H₂ production via Natural and Artificial catalytic systems.
Presented at the BASE Symposium, Madurai, India, Dec. 1978.

Tripathi, P., V.S. Tripathi and K. Bahadur,

178. Investigation of effect of α -Naphthylamine and β -Naphthylamine on organic acids formation of self-sustaining coacervates.
Zbl. Bakt. II. Abt., 134, 198-201 (1979).

Bahadur, K., D.N. Pradhan, U. Jyotishmati

179. Effect of tetracycline on the abiogenesis of sugar.
Vijnana Parishad Anusandhan Patrika, 22(2), 107-114(1979).

Bahadur, K. and D.N. Pradhan

- ✓ 180. Effect of chloramphenicol on the formation of amino acids in the synthetic mixtures which formed Jeewanu.
Proc. Nat. Acad. Sci. India, 49(A), III, (1979).

Bahadur, K. and S. Kumar

- ✓ 181. Effect of Formaldehyde on the abiogenesis of sugars in the mixture of Jeewanu.
Nat. Acad. Sci. Letters, 1 (11), 405-406 (1978).

Bahadur, K. and P. Tripathi

- ✓ 182. Investigation of Inorganic and organic nitrogenous compounds on microbial nitrogen fixation with respect to the fixation cycle.
Zbl. Bakt. Abt. II, Bd. 133, S. 154-156 (1978).

Bahadur, K., S. Ranganayaki, V. Raina and S. Kumar

- ✓ 183. Role of Molybdenum in origin of life.
Proc. Nat. Acad. Sci. India 49(A), II, (1979).

Bahadur, K., S. Ranganayaki, Clair Folsome, and Adolf Smith

- ✓ 184. A functional approach to the origin of life problem.
Natl. Acad. Sci. India, Golden Jubilee Commemoration volume, 1980, 181-198.

Ranganayaki, S., Bharti Srivastava and K. Bahadur

- ✓ 185. Synthesis of phospholipids in microstructures, prepared by the interaction of ammonium thiocyanate, minerals, calcium acetate, potassium dihydrogen phosphate and formaldehyde.
Zbl. Bakt., 135, (2), 265-269 (1980).

Bahadur, K. and S. Kumar

- ✓ 186. Effect of formaldehyde on the abiogenesis of nucleic acid bases in the irradiated mixture of Jeewanu, the protocells.
J. and Proc. Royal Soc. New Southwales, 112, 111-113 (1979).

Bahadur, K., S. Kumar and Jyotishmati, U.

- ✓ 187. Effect of tetracycline on photochemical synthesis of sugar in the mixture of Jeewanu.
Vijnana Parisad Anusandhan Patrika, 23 (2), 141-147(1980).

- ✓ 188. Bahadur, Krishna, S. Ranganayaki, Surendra Singh, M.S.V.B.S.N.Murty and Vinod Kumar Gupta
Detection of the presence of ferredoxin-like compounds in *Jeewanu*, the protocell.
Proc. Nat. Acad. Sci. India, 50(B) II, 114-118 (1980).
Bahadur, Krishna, S. Ranganayaki, Surendra Singh, Sarita Srivastava, Pradeep Verma and Vinod Gupta.
- ✓ 189. Study of the influence of sulphate, sulphide, thiosulphate and bi-sulphite on the formation of microstructures in sterilised aqueous mixtures.
Proc. Nat. Acad. Sci. India, 50(B), IV, 191-197 (1980).
Bahadur, K., Ranganayaki, S. and Maurya, H.K.
- ✓ 190. The effect of magnesium sulphate on the photochemical formation of microstructures with properties of biological order.
Zbl. Bakt. II, Abt. 134, 633-639 (1979).
Ranganayaki, S., Bahadur, K. and Chandra, Mohan.
- ✓ 191. Effect of osmium on microbial fixation of nitrogen.
Proc. Nat. Acad. Sci. India, 50(A) III, 184-188 (1980).
Ranganayaki, S., Bahadur, K. and Chandra Mohan
192. Effect of manganese sulphate on microbial fixation of nitrogen.
Under print in Zbl. Bakt. (1980).
Ranganayaki, S., Bahadur, K. and Chandra Mohan
193. Influence of nickel sulphate on microbial fixation of nitrogen.
Under print Zbl. Bakt. (1980).
Ranganayaki, S., Bahadur, K. and Chandra Mohan
194. Effect of cupric sulphate on microbial fixation of nitrogen.
Under print Zbl. Bakt. (1981).
195. Microbial fixation of nitrogen in presence of Lanthanum sulphate.
Under print in Zbl. Bakt. (1981).
Smith, A., C. Folsome and K. Bahadur
196. Carbon dioxide reduction and nitrogenase activity in organo molybdenum microstructures.
Experientia 37, 357 (1981). Birkhauser Verlag Basel (Schweiz).

Bahadur, K., Ranganayaki, S. and Mohan, C.

- ✓ 197. Microbial fixation of nitrogen in presence of cobaltous chloride.
Zbl. Bakt., 136, (2), 355-58 (1981).

Ranganayaki, S., Bahadur, K. and Sajal Kumar

- ✓ 198. Photochemical fixation of carbon dioxide by Jeewanu, the protocells.
J. Brit. Interplanetary Soc., 34, 251-254 (1981).

Ranganayaki, S., Bahadur, K., Singhal, O.P., Mohan, C., and
Tripathi, R.P.

- ✓ 199. Effect of Ni and Cd on Biogas Production from Cowdung.
Vij. Parisad Anusandhan Patrika, 24 (4), 383-388 (1981).

Ranganayaki, S., Bahadur, K. and Gupta, V.K.

- ✓ 200. Effect of the parental environmental medium on photolytic
decomposition of water by 1:2:1:1 Jeewanu, the Primitive Autotroph.
Proc. Nat. Acad. Sci. India, 51A, II, 231-240 (1981).

- ✓ 201. Isolation and study of the pigments of Clitoria ternatea.
J. In. Chem. Soc., LVI, (10), 1037-38 (1979).
Bahadur, K., Ranganayaki, S. & Srivastava, R.

Bahadur, K., Ranganayaki, S., Singh, Y.P. and Kumar, S.

- ✓ 202. Study of the response to antibiotics in Jeewanu, the self *sustaining*
conserves.
Revista do Instituto de Antibioticos, Recife, 15N, 1/2 dez,
33-36.

✓ 203. Bahadur, K. et al.

Synthesis of Jeewanu, the protocells and study of their functional
properties namely the ability to split water in the sun-light and
fix molecular nitrogen and carbon-dioxide.

7th International Conf. of ISSOL, Mainz, 15th July 1983.

Bahadur, K., S. Ranganayaki, B. Srivastava, Pratima Verma,
Sajal Kumar, P.M. Sinha.

- ✓ 204. Studies of photochemical decomposition of water and fixation of
nitrogen and carbon dioxide by photochemically formed Jeewanu.
Proc. Nat. Acad. Sci. India 52(A), III, 1982.

Bahadur, K. and S. Ranganayaki.

- ✓ 205. Functional approach to the problem of origin of life.
J. Ind. Chem. Soc., 59 (4), 480 (1982).

78 Photo reduction of Carbon and nitrogen by Organo molybdenum microstructures,
Ranganayaki, S., Bahadur, K., Suiha, P.M. and Kumar, S.,
Proc. Nat. Acad. Sci. India, 56A, (1), 35-39 (1986).

79. Effect of chloramphenicol on the abiogenesis of sugar in sterilised aqueous
mixture.

Ranganayaki, S., Singh, S. and Bahadur, K., Revista do Instituto
de Antibioticos, Recife, 199 ~~199~~ 20, (1), 99-104 (1980).

~~80. Effect of antibiotics on the cytological study of nucleic acid-like
material in photochemically formed Jeevanu, the Protocell.~~

80. Role of minerals in abiogenically formed the abiogenesis of nucleic
acid bases in photochemically synthesised coacervates.

Ranganayaki, S., Bahadur, K., Raina, V. and Kumar, S.,
J. Org. Chem. USSR, 17, (9), 1992-1995 (1981)

81. Photochemical fixation of nitrogen by Jeevanu, the Protocell.

Ranganayaki, S. ~~et al.~~ Ranganayaki, S., Kumar, S.,
Srivastava, S. R., Agrawal, S. L. and Mehta, R., Proc. Nat. Acad. Sci.
India, 55A, (3), 196-203 (1985)

82. Effect of titanium on the photochemical splitting of water by Organo
molybdenum microstructures under oxygenic and anoxygenic
condition

Ranganayaki, S., Bahadur, K. and Roy, S., Proc. Nat. Acad.
Sci. India, 56A, (3), 209-214 (1986).

~~72. Ranganayaki, S. Subramanian et al.~~

72. Synthesis of Teenanu, the protocells and study of their functional properties namely to split water in sunlight and fix molecular nitrogen and carbon dioxide.

Ranganayaki et al. 3

72. Study of the facultative nature of photolytic splitting of water by
Jeevanu, the Proto-cells
S. Ranganayaki, S., Singh, S.J. and Bahadur, K.
Proc. Nat. Acad. Sci., ^{India} (1985), LV, A, (1), 1-6.
73. Effect of mineral solution on photochemical splitting of water by
Jeevanu
Ranganayaki, S., S. J. Singh and Bahadur, K., Vijnana
Parisad Anusandhan Patrika .. 28, (2), 203-209 (1985).
74. - Optimum exposure necessary for the formation of high mineral jeevanu
with maximum efficiency of photolytic splitting of water and effect of aging
of jeevanu on their water splitting activity.
Ranganayaki, S., Bahadur, K., Verma, P.K., Sinha, P.M. and Bhattacharya, S.,
Proc. Nat. Acad. Sci., India, 53A, (IV), 319-331 (1983)
75. Influence of ammonium thiocyanate on the synthesis of cysteine in presence of
cobalt sulphate.
Ranganayaki, S., Srivastava, B. and Gyotishmati, U., Vijnan Parisad
Anusandhan Patrika, 21, (2), 185-190 (1978)
76. Effect of biological mineral on the formation and cytology of jeevanu,
The microstructures,
Ranganayaki, S., Bahadur, K. and Sarita Srivastava, Proc. Nat.
Acad. Sci., India, 54A, (3), 279-285 (1984)
77. Photochemical Splitting of Water by Jeevanu,
Ranganayaki, S., Bahadur, K. and Agrawal, V. K., Proc. Nat. Acad.
Sci., India, 56A, (2), 111-116 (1986)

72. Study of the facultative nature of photolytic splitting of water by Jeewanu, the Protocells.
Ranganayaki, S., Singh, S.J. and Bahadur, K.
Proc. Nat. Acad. Sci. India (1985), LV, A(1), 1-6.
73. Effect of mineral solution on photochemical splitting of water by Jeewanu.
Ranganayaki, S., S.J. Singh and Bahadur, K., Vijnana Parisad Anusandhan Patrika. 28, (2), 203-209 (1985).
74. Optimum exposure necessary for the formation of high mineral Jeewanu with maximum efficiency of photolytic splitting of water and effect of aging of Jeewanu on their water splitting activity.
Ranganayaki, S., Bahadur, K., Verma, P.K., Sinha, P.M. and Bhattacharya, S., Proce. Nat. Acad. Sci, India, 53A, (IV), 319-331 (1983).
75. Influence of ammonium thiocyanate on the synthesis of cystein in presence of cobalt sulphate.
Ranganayaki, S., Srivastava, B. and Jyotishmati, U., Vijnan Parisad Anusandhan Patrica, 21, (2), 185-190 (1978).
76. Effect of biological mineral on the formation and cytology of Jeewanu, the microstructures.,
Ranganayaki, S., Bahadur, K. and Savita Srivastava,
Proc. Nat. Acad. Sci, India, 54A, (3), 279-285 (1984).
77. Photochemical splitting of water by Jeewanu,
Ranganayaki, S., Bahadur, K. and Agrawal, V.K.,
Proc. Nat. Acad. Sci., India, 56A, (2), 111-116 (1986).
78. Photoreduction of carbon and nitrogen by organo molybdenum microstuctures,
Ranganayaki, S., Bahadur, K., Sinha, P.M. and Kumar, S.
Proc. Nat. Acad. Sci. India, 56A, (1), 35-39 (1986).
79. Effect of chloramphenicol on the abiogenesis of sugar in sterilised aqueous mixture,
Ranganayaki, S., Singh, S. and Bahadur, K.,
Revista do Instituto de Antibioticos, Recife, 20, (10), 99-104 (1980).
80. Role of minerals in the abiogenesis of nucleic acid bases in photochemically synthesised coacervates.
Ranganayaki, S., Bahadur, K., Raina, V. and Kumar, S.,
J. Org. Chem. USSR, 17, (9), 1992-1995 (1981).

81. Photochemical fixation of nitrogen by Jeewanu, the
Proto-cell.

Ranganayaki, S., Kumar, S., Srivastava, S.R.,
Agrawal, S.L. and Mehta, R., Proc. Nat. Acad. Sci. India,
55A (3), 196-203 (1985)

82. Effect of titanium on the photochemical splitting of water
by organo molybdenum microstructures under oxygenic and
anoxygenic condition.

Ranganayaki, S., Bahadur, K., and Roy, S.,
Proc. Nat. Acad. Sci. India, 56A, (3), 209-214 (1986).

LIST OF PUBLICATIONS OF KRISHNA BAHADUR S. RANGANAYAKI

Bahadur, K. and Ranganayaki, S.

1. Photosynthesis of amino acids from paraformaldehyde ^{and} potassium nitrate. Nature; 173, 1141(1954). _K
2. Studies in production of yeasts.
(Proc. Natl. Acad. Sci., India, 16A, I, 24-26(1947).
3. Isolation and study of the growth of Dhar yeast, which give high yield of yeast and produce very little alcohol when grown in sucrose culture as compared to S. turbidans, S. cerevisies; Tutilis and other variety of yeasts.
(Proc. Natl. Acad. Sci., India, 19A (II), 55-60(1950).
4. Study of the effect of zinc sulphate in the culture ^{of} yeast as regard to the growth of yeast, alcohol-formation and acid production using sucrose and ethyl alcohol separately as the source of carbon food, under non-aerated conditions.
(Proc. Natl. Acad. Sci., India, 19A (II), 61-66(1950).
5. Study of the growth of Dhar yeast in culling containing ethyl alcohol as the source of carbon and different amm. salt as the source of nitrogen under non-aerated conditions.
(Trans. Royal Soc., New Zealand, 82, (2), 219-221(1954).
6. The effect of ammonium sulphate of the growth of Dhar yeast cultures containing sucrose as the source of carbon.
(Trans. Royal Soc., New Zealand. 81 (4), 469-71(1954).
7. Study of the growth of Dhar yeast in cultures containing different concentrations of ethyl alcohol as the source of carbon food under non-aerated conditions.
(Proc. Natl. Acad. Sci., India 19A (II), 67-70(1950).
8. A study of the influence of the concentration of sucrose and Amm. nitrate on the metabolism of Dhar yeast.
(J. Sci. Res. Inst., Japan, ~~No. 1950~~, 48, 143-147(1954).
9. A study of the effect of ^{fuchsin} ~~fuchsin~~ red. on the metabolism of yeast.
(Bull. Chem. Soc., Japan, 27 (5), 297-300(1954).
10. A study of the effect of calcium ions on the metabolism of Dhar yeast.
(Bull. Acad. Royal de-Belgique. Seauca. du ^{XL} ~~V~~, 403-407(1954).
11. A study of the influence of phosphate on the metabolism of Dhar yeast.
(Bull. Acad. Royal de Belgique Seanc. du ^{XL} ~~V~~, 995-999(1954).
12. A study of the influence of concentration of sucrose and ammonium nitrate in the culture of Dhar yeast on its metabolism at constant carbon nitrogen ~~ratio~~ under non-aerated conditions.
(Proc. Natl. Acad. Sci., India 23A (I), 1-7(1954).

fuchsin

ratio

13. A comparative study of the growth of Dhar yeast and *S. calsergenensis* in cultures containing only ethyl alcohol as source of carbon under non-aerated conditions.
 (Proc. Natl. Acad. Sci., India 23A (~~Part~~ I), 8-12(1954).
14. Study of the mutations in Dhar yeast affected by fuchsin red.
 (Proc. Natl. Acad. Sci., India, 23A (~~Part~~ I), 13-20(1954).
15. Effect of carbon nitrogen ratio on the growth and other physiological properties of Dhar yeast.
 (Acta. May. C. C. C. P. Maku. Russia, Tour XXIV, 2, 141-~~146~~(1955)
16. The reactions involved in the formation of compounds preliminary to the synthesis of protoplasm and other materials of biological importance.
 (Report of the International Symposium on, "The Origin of life on the earth" held at Moscow in Aug. ~~1957~~, 91-~~106~~(1957).
17. A study of the growth of Dhar yeast utilising the energy released by the aeration of several metals.
 (Zentralbl.f. Bakteriologie, Parasitenkunde, Infektionskrankheiten U. Hygiene, II Abt. 110, 309-11(1957).
18. Isolation and morphological studies of Dhar yeast.
 (Ibid., 305-~~309~~(1957).
19. Influence of magnesium ion concentration on the metabolism of Dhar yeast.
 (Proc. Natl. Sci., India, 26A (I), 81-~~86~~(1957).
20. Bahadur, K., Galand and Smith, A.E., Space-flight, 11, 325.(1968)
21. The role of aromatic hydrocarbons in the photosynthesis of amino acids.
 (J. Gen. Chem. ~~Vol.~~ 33, Nov. (1963).
22. A study of the influence of the change of C/N ratio on the loss of nitrogen and other physiological properties of *Pichia indica* in cultures containing urea and ethyl alcohol as sources of nitrogen and carbon, respectively under non-aerated conditions.
 (Proc. Natl. Acad. Sci., India, 27A (~~Part~~ VI), 286-~~298~~(1958).
23. A study of the change in physiological properties of Dhar Yeast by growing it in cultures containing sucrose, ethyl alcohol or methyl alcohol as the source of carbon food.
 (Archiv.f. Mikrobiologie, 33, 49-51(1959).
- Bahadur, K. and Rajam, S.
24. A study of the relationship between the size of the kidney and the size of the fish.
 (Proc. Natl. Acad. Sci., India, 27A (II), 87-90(1958).

Bahadur, K. Tandon, S.P. and Chauhan, J.S.

25. Study of 'The formation of free amino acids in the cell free culture and within the cells of Dhar yeast employing d.l.-alanine and sucrose as the sources of nitrogen and carbon, respectively.
 (Zeit.fur Baktariology, Parasitenkunde.
 Infektionskrankheiten u.Hygiene II Abt. 110, 674-75(1957)).

Bahadur, K. and Sinha, R.C.

26. Influence of the concentration of papain ^{activated} by hydrogen sulphide on the hydrolysis of casein at different temperatures and pH value 4.4.
 (Enzymologia, ~~Vol.~~ XVIII (5), 288-92(1957)).
27. Fractionation of commercial papain employing precipitation by fractional saturation with ammonium sulphate.
 (Cytologia, ~~Vol.~~ 22, ~~Nov~~ (1), 53-59(1957)).
28. Der einfluss der Wasserstoffion-Konzentration und der temperature auf die Milchgerinnung und Casein hydrolyse durch Papain.
 (Zeiteschrift fur Leberamittal-Untersuchung und Forschung, 105, ~~Band~~ (4), ~~Seite~~ 319-321(1957)).
29. Role of 8-hydroxy quinoline on the inhibition of enzymic activity of papain by Fe, Cu and Mn.
 (Ind.J.Appl.Chem., 21 (3), 114-113(1958)).
30. Comparative study of the activation of papain by bisulphite and ammonium ions.
 (Proc.Natl.Acad.Sci.India, 26A (I), 53-57(1957)).
31. The influence of vitamin C in presence of Fe⁺ and Mn⁺ ions on the proteolytic activity of papain employing casein as the substrate.
 (Enzymologia, XIX, 125(1958)).
32. Influence of heat on the inhibition of enzymic property of papain.
 (Enzymologia, XX, 17(1958)).
33. Comparative study of the proteolytic activities of papain and ^{trypsin} against egg albumin and meat extract.
 (Enzymologia, XIX, 319(1958)).
34. Fractionation and crystallisation of commercial papain.
 (Enzymologia, XIX, 323-26(1958)).
35. Influence of the concentration of heavy metal/salts on the proteolytic activity of papain.
 (Enzymologia, XIX, 128-32(1958)).

Bahadur, K. and Dube, J.N.

36. Study of 2,3-butenediol formation by *Serratia marcescens*.
(Archiv.f.Mikro., Germany, Archiv.f.Microbiol., Bd., 32,
16-19(1958).)
37. Study in production of 2,3-butenediol by *Serratia marcescens*
from agricultural waste materials.
(Ind. J. Appl.Chem., Vol. 22 (No. 3), 99-102(1959).)
38. Influence of basic and acidic ions on the formation of 2,3-
butenediol by *Serratia marcescens*.
(Japan J.Microbiology, Vol. 3 (No. 1), 49-52(1958).)
39. Eine untersuchung uber die Bildung von 2,3-butenediol in
Kulturen von *Serratia marcescens* unter Verwendung verschieden
er Kohlenhydrate als Kohlestoffquelle.
(Biochemische Zeitschrift, Bd. 331, S. 375-376(1959).)

Bahadur, K. and Ranganayaki, S.

- (40) Probable reactions involved in the photosynthesis of prolin,
serine and other amino acids.
(Comptes Rendu.France, 240, 246-8(1955).)
41. A study of the influence of hydrogen ion concentration on the
synthesis of amino acids from paraformaldehyde and potassium
nitrate.
(Proc.Natl.Acad.Sci. ^{India} 23A, 21-23(1954).)
42. A study of the growth of *Pichia membranaefaciens* utilising
the energy obtained by the oxidation of different metallic
hydroxides by aeration.
(Bull.Chem.Soc., Japan, 27 (6), 313-104(1954).)
43. A study of the influence of zinc and iodide ions on the
formation of amino acids in the culture of *Pichia*
membranaefaciens.
(Acta Micro.Sinica, III, 1, 99-102(1955).)
- F.6
7
(45) Long period preservation of the Dhar Yeast in active form. 1053-5
(Bull.Acad.Royal de Belgique Seance du 8 Oct. 429-431(1955).)
46. Separation of amino acids ^{after} formed photochemically ^{synthesizing them} from a mixture
of paraformaldehyde, potassium nitrate and ferric chloride water.
(Proc.Natl.Acad.Sci. India, 26A (II), 154-162(1957).)
47. Formation of amino acids in water containing dissolved carbon
dioxide and molybdenum colloid on exposure to artificial
light.
(U.S.S.R. Acad. Sci., 6, 754-15(1957).)

- (40) A study of the influence of ammonium sulphate on
the mineral intake of *Pichia membranaefaciens*
at different pH. Antonie van Leeuwenhoek. 20
429-31. (1954).

- 48 47. Photosynthesis of amino acids from paraformaldehyde involving the fixation of nitrogen in the presence of colloidal molybdenum oxide as catalyst.
(Nature, 182, 1668(1958).
- 49 48. Formation of peptide bonds in aqueous solution and aqueous line of molecular evolution.
(Proc. Natl. Acad. Sci. India, 27A (~~Part~~ VI), 292-95(1958).
- 50 49. Aqueous line of molecular evolution.
(Izvestiya Akademii nauk U.S.S.R., 11, 1361-1365(1958).
- 51 50. Carbondioxide Ke pani Vilayan men amino amlon Ka prakash sanshleshan.
(Vigyan Parishad Anusandhan Patrika, 1, Kr.2, 99-101(1958).
- 52 51. A study of 2,3-butanediol formation in molassen culture.
(Ind. J. Chem. Soc., 21 (~~2~~), 74-76(1958).
- 53 52. A study of the influence of milk, phosphate and calcium carbonate on the formation of 2,3-butanediol in *Serratia marcescens* cultures.
(Japan, J. Microb, 2, (2), 197-201(1958).
- 54 53. The influence of minerals on the formation of 2,3-butanediol by *Aerobacter aerogenes*.
(Archiv. fur Mikrobiologie, Bd. 29, 363-367(1958).
- 55 54. Studies in 2,3-butanediol formation fermentation.
(Zentrablatt fur Bacteriologie, Jena, II, Abt., III, 111, 698-701(1958).
- 56 55. A study of the influence of the concentration of molasses sugar on the formation of 2,3-butanediol in the culture of *A. aerogenes* and *B. polymyxa*.
(Zentral bl. Baketriologia. II. Abt., 112, 506-~~509~~⁹(1959).
- 57 56. A study of the influence of zinc ions on the production of 2,3-butanediol by *Pichia indica*.
(Archiv. f. Mikrobiologie, Bd. 32, 309-311(1959).
- 58 57. The influence of zinc ions on the formation of 2,3-butanediol in *B. Polyxa* cultures.
(Japan, J. Microbiol 2 (~~2~~ -4), 407-409(1958).
- 59 58. The influence of iron, SO_3^- and formaldehyde on the formation of 2,3-butanediol in the cultures of *B. polymyxa*.
(Archiv. fur Mikro., Bd. 32, 369-372(1959).

~~Rangaswami S.~~
- A study of the influence of ammonium sulphate on the mineral intake of *Pichia membranifaciens* at different pH. *Antonie van Leeuwenhoek* 20, 429-31 (1954)

Bahadur, K. and Atreya, B.D.

- 2/
- 60 ~~59~~. A study of the influence of casein concentration of papain-casein reaction at different hydrogen ion concentrations and employing boric acid/borate and citric acid/phosphate buffers.
(Enzymologia, XX(6), 327-335(1959).
Bahadur, K., and Verma, H.C.
- 61 ~~60~~. Study of the influence of phosphate ions concentration on the absorption of Mg^{++} , Ca^{++} nitrogen metabolism and the yeast growth.
(Zentrablatt, f. Bakteriologie, II Abt., 111 Veb, Jena. 405-409(1958).
- 62 ~~61~~. Influence of the concentration of zinc ions on the comparative absorption of metallic ions by the yeast cells and yeast growth.
(Proc. Natl. Acad. Sci, India, 27A(~~Part~~ IV), 177-181(1958).
- 63 ~~62~~. Influence of K^+ concentration on carbon and nitrogen consumption and Ca^{++} , Mg^{++} and PO_4^{--} absorption by yeast cells.
(Zentralblatt fur Bakteriologie, II, Abt., 112, 34-37(1959).
- 64 ~~63~~. Influence of Ca^{++} concentration on the comparative absorption of metallic ions by the yeast cells and on the yeast growth.
(Cytologia, Vol. 23(~~Vol. 1~~), 9-13(1958).
- 65 ~~64~~. Study of the influence of Mg^{++} on the absorption minerals, sugars, and nitrogen nutrients by the yeast cells.
(Zentrablatt fur Bakteriologie, ~~Vol. 112~~ II Abt. 112, 604-607(1959).
- 66 ~~65~~. Influence of nitrogen concentration on the absorption of minerals and yeast growth in the cultures of *Pichia indica*.
(Vigyan Parishad Anusandhan Patrika ~~Vol. 2~~, (3) 163-168(1959).
- Bahadur, K., and ~~Amlesh Kumar~~ Saroj, K.K.
- 75 ~~66~~. Study of the influence of concentration of sucrose on the acetone-butanol fermentation by different strains of *Clostridium*.
Proc. Natl. Acad. Sci. India, 28A(~~Part~~ III), 87-96(1959).
Bahadur K., and Vishnu Chandra, V.
- 78 ~~67~~. ~~Bahadur K., and Vishnu Chandra~~, Inhibition of Urease by lead acetate.
(Enzymologia, XX, 355-358(1959).
- 4/
- Bahadur, K.
- 84 ~~68~~. Investigation of the influence of concentration of carbon and nitrogen in the culture of *Pichia indica* at carbon-nitrogen ratio 20.
(The Japanese Journal of Microbiology, Vol. 4, (2) 79-82, ~~Vol. 1~~, (1960).

K. Bahadur and S. Ranganayaki, S.

- 85^{69.} Influence of certain metabolites formed during microbial dissimilation of carbohydrate on the formation of 2,3-butanediol in the cultures of *B. polymyxa*.
(Bulletin De L'Academie Polonaise Des Sciences ~~8~~ VIII, ~~10~~, 435-49 (1960).
- 86^{70.} The influence of aluminium oxide on the formation of 2,3-butanediol in the cultures of *Bacillus polymyxa*.
(Zent. f. Bakt. II Abt. 113, 215-218 (1960).
- 87^{71.} A study of the influence of certain enzyme poisons and of compounds which hinder the various enzymic processes taking place during normal microbial dissimilation of carbohydrate on the formation of acetoin and 2,3-butanediol by *A. hydrophila*.
(Zentralblattes fur Bakteriologie, II Abt, 113, 465-469 (1960).
- 88^{72.} A study of the influence of the toxins supported by absorption on wood charcoal from the cultures of *Bacillus polymyxa*, to the *Antonie Van Leeuwenhoek* 26, p. 23-26 (1960).

Bahadur, K. and Rajam, S.

- 89^{73.} An investigation of the possibilities of the use of molasses for the production of 2,3-butanediol by certain Diol forming Bacteria.
(Indian J. Appl. Chem., 23, 1 (1960).
- 90^{74.} Study of phosphoric kidney of *Wallagonia Attila*.
(Natl. Acad. Sci. India. Vol. XXX., Part IV, (1960), 345-348.
Bahadur, K. and Dube, J. N.
- 91^{75.} A study of the formation of pigment by *Serratia marcescens*.
(Proc. Natl. Acad. Sci. India. 28A (V), 254-07 (1959).

Bahadur, K. and H. C. Verma, H. C.

- 92^{76.} Study of the influence of sucrose concentration on the mineral assimilation of yeast.
(Zbl. Bakt. Abt. II, 113, 511-514 (1960).

Bahadur, K. and B. D. Atreya, B. D.

- 67^{77.} Influence of different buffers on the hydrolytic properties of papain against casein.
(Indian J. Appl. Chem. 22, (5-6), 221 (1958).
- 68^{78.} Effect of anthraquinone, benzoquinone, hydroquinone and resorcinol on the hydrolysis of casein by papain.
(Enzymologia XXI, 238-244 (1960).

Bahadur K. & Ranganayaki S.

A study of the reducing materials formed during 2,3-butanediol fermentation.
Publ. Fac. Sci. Univ. B.R.N.O. Czechoslovakia 411, 95-102 (1960)

Bahadur, K. & Verma H.C.
Concentration of the assimilation of Ca+1 Mg+1 and PO4⁻³ by *Pichia indica* under aerobic and anaerobic conditions. Jap. J. of Microbiol. 4(3), 243-8 (1960)

- 3
- 69-79. Study of the proteolysis of certain vegetable proteins by papain.
(Enzymol. ~~Vol.~~ XXIII, 137-156 (1960).
- 70-80. A study of the influence of the sequence of addition of foreign substances on the action of papain.
(Invest. Akad. Nauk. 745, (1960).
- 71-81. The influence of amines on the protolysis of casein by papain.
(Enzymologia, XXI, 13 (1959).
- 72-82. Study of the effect of ripe papaya extract on the ^{proteolytic} ~~proteolytic~~ property of papain.
(Enzymologia, XXI, 325-36 (1960).
- 73-83. Influence of amino acids and amines on the enzymic activity of papain.
(Proc. Natl. Acad. Sci. India, 30A (II), 126-40 (1961).
- 74-84. The formation of enzymoid of papain in an aqueous solution of glycine.
(Proc. Natl. Acad. Sci. India, 30A (II), 141-145 (1961).

K. Bahadur and ~~Ganga~~ Chandra, V.

- 79-85. Inhibition of urease by lead acetate.
(Enzymol. ~~Vol.~~ XX, pp. 1-12 (1959).
- 80-86. Decomposition of urea by urease.
(Enzymol, ~~Vol.~~ XXI, pp. 1-12 (1959).
- 81-87. A study of the decomposition of urea by the aqueous extract of glycine soybeans.
(Enzymol. XXI, 209-215 (1960).
- 82-88. Studies on the influence of stannous chloride on the decomposition of urea by soyabean urease.
(Enzymol. XXII, 60-72 (1960).
- 83-89. Influence of enzyme and substrate concentration on the decomposition of urea by commercial urease, and urease obtained from glycine soja in phosphate buffer.
(Enzymologia, XXIII, 117-122 (1961).

K. Bahadur and ~~Nandesh Chandra~~ Saroj, K.K.

- 76-90. Study of the influences of charcoal on the acetone-butanol fermentation by different strains in clostridium.
Japanese J. of Microbiology Vol. 4 (No. 1), p. 43-51 (1960).

65)

~~81.~~

Photochemical fixation of nitrogen by Jeewanu, the
Protocell.

Ranganayaki, S., Kumar, S., Srivastava, S.R.,
Agrawal, S.L. and Mehta, R., Proc. Nat. Acad. Sci. India,
55A (3), 196-203 (1985) X

66)

~~82.~~

Effect of titanium on the photochemical splitting of water
by organo molybdenum microstructures under oxygenic and
anoxygenic condition.

Ranganayaki, S., Bahadur, K., and Roy, S., X
Proc. Nat. Acad. Sci. India, 56A, (3), 209-214 (1986).

58)

~~67)~~ Effect of chloramphenicol on the abiogenesis of sugar
in sterilised aqueous mixtures. Bahadur K. Ranganayaki
and Singh S
Revista de Instituto de antibioticos, Recife 20 (1/2) dez
99-104 (1981)

67.

Effect of ~~antibiotics~~ on chloramphenicol

- 56 72. Study of the facultative nature of photolytic splitting of water by Jeewanu, the Protocells.
Ranganayaki, S., Singh, S.J. and Bahadur, K.
Proc. Nat. Acad. Sci. India (1985), LV, A(1), 1-6. ✓
- 57 73. Effect of mineral solution on photochemical splitting of water by Jeewanu.
Ranganayaki, S., S.J. Singh and Bahadur, K., Vijnana Parisad Anusandhan Patrika. 28, (2), 203-209 (1985). ✓
- 58 74. Optimum exposure necessary for the formation of high mineral Jeewanu with maximum efficiency of photolytic splitting of water and effect of aging of Jeewanu on their water splitting activity. ✓
Ranganayaki, S., Bahadur, K., Verma, P.K., Sinha, P.M. and Bhattacharya, S., Proce. Nat. Acad. Sci, India, 53A, (IV), 319-331 (1983).
- 59 75. Influence of ammonium thiocyanate on the synthesis of cystein in presence of cobalt sulphate. ✓
Ranganayaki, S., Srivastava, B. and Jyotishmati, U., Vijnan Parisad Anusandhan Patrica, 21, (2), 185-190 (1978).
- 60 76. Effect of biological mineral on the formation and cytology of Jeewanu, the microstructures.,
Ranganayaki, S., Bahadur, K. and Savita Srivastava, ✓
Proc. Nat. Acad. Sci, India, 54A, (3), 279-285 (1984).
- 61 77. Photochemical splitting of water by Jeewanu,
Ranganayaki, S., Bahadur, K. and Agrawal, V.K., ✓
Proc. Nat. Acad. Sci., India, 56A, (2), 111-116 (1986).
- 62 78. Photoreduction of carbon and nitrogen by organo molybdenum microstructures,
Ranganayaki, S., Bahadur, K., Sinha, P.M. and Kumar, S.
Proc. Nat. Acad. Sci. India, 56A, (1), 35-39 (1986).
- 63 79. Effect of chloramphenicol on the abiogenesis of sugar in sterilised aqueous mixture,
Ranganayaki, S., Singh, S. and Bahadur, K., ✓
Revista do Instituto de Antibioticos, Recife, 20, (1); 99-104 (1980).
- 64 80. Role of minerals in the abiogenesis of nucleic acid bases in photochemically synthesised coacervates. ✓
Ranganayaki, S., Bahadur, K., Raina, V. and Kumar, S.,
J. Org. Chem. USSR, 17, (9), 1992-1995 (1981).

Bahadur, K., Patra H.D & Perki O.G.N.
 Photochemical formation of peptides bonds in aqueous solution, Proc. Natl. Acad. Sci. India 30 A (II), 206-20 (1961).
 Photo Synthesis of peptides in a mixture of glycine and tryptophan and glycine in presence of urea in the mixture, Ind. J. Appl. Chem. 35, 90-6 (1961).
 Photochemical formation of peptides bonds in aqueous solution, Proc. Natl. Acad. Sci. India 30 A (II), 206-20 (1961).
 Photo Synthesis of peptides in a mixture of glycine and tryptophan and glycine in presence of urea in the mixture, Ind. J. Appl. Chem. 35, 90-6 (1961).
 Photochemical formation of peptides bonds in aqueous solution, Proc. Natl. Acad. Sci. India 30 A (II), 206-20 (1961).
 Photo Synthesis of peptides in a mixture of glycine and tryptophan and glycine in presence of urea in the mixture, Ind. J. Appl. Chem. 35, 90-6 (1961).
 Photochemical formation of peptides bonds in aqueous solution, Proc. Natl. Acad. Sci. India 30 A (II), 206-20 (1961).
 Photo Synthesis of peptides in a mixture of glycine and tryptophan and glycine in presence of urea in the mixture, Ind. J. Appl. Chem. 35, 90-6 (1961).

99) K. Bahadur & R.B. Srivastava, R.B.
 Photochemical formation of amino acids in a mixture containing different sources of carbon in presence of nickel as catalyst.
 J. Acad. Sci, U.S.S.R., 9 1608-11 (1962)

77) A study of the influence of hydrogen ion concentration of the culture media on the formation of acetone and butanol by clostridium species using sucrose as substrate in synthetic media.
 Japanese J. Microbiol., 4(4) 341-49 (1960).

K. Bahadur and ~~Indra Kumari~~ Verma, I.K.

94) 92. Fractionation of papain by ethanol and investigation of the proteolytic and milk clotting properties of different enzymic fraction
 (Enzymologia vol. XXI 145-154 (1959)).

95) 93. Fractionation of commercial papain by acetone and investigation of the proteolytic and milk clotting properties of different fractions.
 (Enzymologia vol. XXI, 114-122 (1959)).

96) 94. Effect of heat on cupri-papain as indicated by its milk clotting and proteolytic activities.
 (Enzymologia vol. XXI, 365-371 (1960)).

97) 95. Investigation of optimum pH for the hydrolysis of casein by papain and its alcoholic fraction at 50°C.
 (Biochemical Application, Rare. n. 2(7), 73 (1960)).

K. Bahadur and R.B. Srivastava, R.B.

98) 96. Photosynthesis of peptides in the aqueous solutions of aspartic acid and glycine.
 Indian J. Appl. Chem. 23, 431-44 (1960),
 Agrawal, K.M.L.

K. Bahadur, ~~C.N. Patra and H.D. Patra~~

102) Influence of the source of carbon in photochemical fixation of nitrogen in aqueous mixture containing molybdic acid as the catalyst.
 Proc. Natl. Acad. of Sciences, India, ~~Part I~~ Vol. XXXII A (I) Part (I) 1962, pp. 83-87 (1962).

K. Bahadur and Vishnu Chandra, V.

106) 99. A study of the inhibitory influence of Ag⁺, Au⁺⁺⁺ and Cu⁺⁺⁺ ions on the influence decomposition of urea by soyabean (Glycine soja) ureas.
 Proc. Natl. Acad. Sci. India, ~~Sec. A~~ Vol. XXXII (A) Part (I), pp. 72-82 (1962).

K. Bahadur, and Srivastava, R.B.

100) The influence of catalysts and period of irradiation in the photosynthesis of amino acids in a mixture of paraformaldehyde and potassium nitrate.
 Zurnal obscherikimii, Tom XXXI (XCIII), 3017-120 (1961).

Bahadur K & Agrawal K.M.L.

103) Photochemical fixation of nitrogen in solution containing paraformaldehyde as a source of carbon in the presence of catalyst.
 J. Ind. Res (Sci.), 21 B (7) 335-37 (1962)

(107) Bahadur K & Ranganayakhi,

An Investigation of the role of intra and extracellular enzymes in the production of acetoin and 2,3 butanedial by *Bacillus polymyxa*.

Jap. J. of Microbiol. 5 (1) 11-5, (1961)

— Bahadur K., & Verma H. C.

Optimum growth of *Synonym* of maximum hydration of the protoplasmic material. Zbl. Bakt. II Abt. 112, 429-43 (1964)

(113)

— Bahadur K., Ranganayakhi, J. and others,

Synthesis of Ilexwax Part I & II. Photochemical preparation of growing and multiplying units with metabolic activities. Zbl. Bakt. II Abt. 117, 575-84 (1964).

— Bahadur K. & Saxena S.

(109)

Bahadur K., & Agrawal KML

Photochemical fixation of nitrogen in solution containing paraformaldehyde as a source of carbon in the presence of catalysts. J. of Scientific & Industrial Res. 21 B (7), 336-7 (1962)

110 K. Bahadur + R. B. Srivastava

The influence of hydrogen ion concentration on the photochemical formation of amino acids.
I.S.B. A.N. U.S.S.R. Otd. Khim. 6, 1070-74 (1963)
Preparation of Jeewanu units capable of growth, multiplication and metabolic activity

111 Vijnana Parishad Anusandhan Patrika 6, 63-117 (1963)
112 The role of aromatic hydrocarbons in the photosynthesis of amino acids. J. Gen. Chem., U.S.S.R. 39A, 39A (1963)

110 K. Bahadur + H.C. Verma
Photochemical formation of peptide in aqueous solution of glutamic acid, lysine and leucine in presence of sucrose.
Biochemistry J., U.S.S.R. BBI 4 T 27, (708-714), (1962)

1101 Bahadur K. + Srivastava R.B.
Vibhinna Prakar Ke Kanch Ke Bartano melanine Ka Prakash Vighatan.
Vigyan Parishad Anusandhan Patrika, 5 (I), 57-59 (1962).
K. Bahadur and Ranganayaki, S.

1106 A study of the reducing materials formed during 2:3 butanediol fermentation.
Publ. Fac. Sci. University, BRNO, Czechoslovakia, 411, 95-102 (1960).

1108 Optimum growth in *Synonymum* of maximum hydration of the photoplasmic material
Bahadur, K., and Malviya, A.N. Zbl. Bakt. 117 (II), 422-43 (1964)

1116 Role of sugar concentration on the formation of acids in the culture media of a few strains of *Aspergillus niger*.
Zbl. Bakt., II Abt, 117, 66-69 (1963)
Bahadur, K. + Agarwal, K.M.L.

1114 Synthesis of Jeewanu, units of capable of growth, multiplication and metabolic activity.
(Zbl. Bakt. 117, 585-602 (1964).
Bahadur, K. and Agarwal, K.M.L. + Saxena I.

1117 Studies in the photochemical fixation of Nitrogen.
(J. Org. Chem., U.S.S.R., 6 (III), 248 (1963).
Bahadur, K. and Saxena, I.

1118 Study of a papain activation factor present in the dialyzable fraction of soyabean extract.
Biologia Plantarum, 6, 165 (1964).
Bahadur, K. and Saxena, I.

1119 Examination of the irradiated aqueous mixtures of organic compounds and inorganic salts for enzymic activity.
(Vijnana Parishad Anusandhan Patrika, 6, 161-168 (1963).
Bahadur, K.
~~Bahadur, K.~~

1120 Conversion of lifeless matter into living systems.
Zbl. Bakt., 118, 671 (1964).
Bahadur, K. and Saxena, I. Saxena I.

1121 Adaptability in enzymes
Biologia Plantarum, 7, 86 (1965).
Bahadur, K. and Pande, R.S.

1122 Photochemical formation of peptide in aqueous solution containing glutamic acid, in presence of different catalysts.
J. Ind. Chem. Soc., 42, (2) 75-85 (1965).
Photochemical formation of peptides in aqueous mixture

Biologia plantarum

of glycine - alanine in presence of sucrose using
 containing sucrose as the energy material and molybdic
 acid as catalyst.

Vijnana Parishad Anusandhan Patrika, 7, (2-3)
 57-65(1964).

Bahadur, K. and Agarwal, K.M.L.

- 124 ~~112~~ Study of the photochemical fixation of nitrogen in synthetic mixtures containing organic acids as source of carbon and mixtures of colloidal iron and molybdenum oxide as catalysts.
 (Vijana Parishad Anusandhan Patrika, 7(2-3), 51-56(1964).

Bahadur, K., Pandey, R.S., Perti, O.N. and Pathak, H.D.

- 129 ~~117~~ The Origin of ~~the~~ living systems. ¹⁹⁷⁻²²³
 (Agra Univ. J. Res. (Sci.), 13(II), ~~607~~, (1965).

Bahadur, K. and Agarwal, K.M.L.

- 125 ~~114~~ Influence of calcium ions on growth and nitrogen fixation in cultures of nitrogen fixing micro-organism Azobactor chroocum strain no. 120/2/1B/2B at pH values 6.5, 7.0 and 7.5.
 (Zbl. Bakt., 119, 245-255(1965).

Bahadur, K. and Sinha, K.K.

- 130 ~~115~~ ~~Bahadur, K.~~ Study of the influence of the sodium salts of the fatty acids on the ^{biological} fixation of nitrogen.
 (Zbl. Bakt., 119, (2), 239-244(1965).

Bahadur, K. and Agarwal, K.M.L.

- 126 ~~116~~ ~~123~~ Photochemical fixation of Nitrogen in sterilised aqueous mixtures containing paraformaldehyde and inorganic catalysts.
 (Vijnana Parishad Anusandhan Patrika. 8, (2), ~~43-62~~ 71-82 (1965).

Bahadur, K. and Pande, R.S.

- 123 ~~117~~ Investigation on photochemical formation of peptide in aqueous mixtures of tyrosine and leucine in presence of some organic acids or sugars. ⁴³⁻⁶²
 Vijnana Parishad Anusandhan Patrika, 8, (2), ~~43-62~~ 71-82 (1965).

Bahadur, K.

- 131 ~~118~~ ~~125~~ About experiments on preparation of Jeewanu from thermal peptides.
 (Agra Univ. J. Res. (Sci.), 14 (1), 41-48(1966).

- 132 ~~119~~ ~~126~~ Synthesis of Jeewanu, the protocell.
 (Bulletin of Indian Photobiology group, 4, 8-16 ~~1966~~, (1966).

Bahadur, K. and Saxena, I.

- 134 120. Study of the papain activation factor present in the dialyzeable fraction of soyabean extract.
127
(Biol. Plant. Acad. Sci. Bohemslor, 6, 165 (1964).)

Bahadur, K. and Agrawal, K.M.L.

- 127 127. Influence of Hydrogen ion concentration on the photochemical fixation of nitrogen in mixtures containing tartaric acid as source of carbon and mixtures of colloidal Molybdenum and iron oxides as catalyst.
128
(J. Chem. Soc., U.A.R., 9(1), 67-72 (1966).)

Bahadur, K. and Malaviya, A.N.

- 135 129. The role of hydrogen ion concentration ^{and fermentation period} on the production of acids by *Aspergillus niger*.
(Zbl. Bakt. 120, (2), 616-620 (1966).)

Bahadur, K.

- 133 131. Jeewanu, the Protocell. M/s. Ram Narain Lal Beni Prasad, Allahabad, 2, India (1966).
- ~~Synthesis of Jeewanu, the protocell, Bulletin of Indian Phycobiol. Group, 4, 2-16 (1966)~~
Bahadur, K. and Malviya, A.N.

- 136 124. The role of period of fermentation on the production of citric acid by *Aspergillus niger*.
131
(Zbl. Bakt. 120, (2), 121-124 (1966).)

- 137 125. Dynamine role of metal ions in the production of citric acid by *Aspergillus niger*.
132
(Zbl. Bakt., 120(2), 726-731 (1966).)

- 138 126. The influence of mineral nutrients on the microbial production of citric acid.
133
(Zbl. Bakt., 120, (2), 732-739 (1966).)

Bahadur, K. Ranganayaki, S., Ajit Kumar, and Srivastava, P.

- 139 134 127. Synthesis of Molecular association with the properties of biological order.
127
(Zbl. Bakt., 120(I), 740-752 (1966).)

Bahadur, K. and Agarwal, K.M.L.

- 128 128. Influence of Calcium ions on growth and nitrogen fixation in cultures of Nitrogen fixing organism.
(Zbl. Bakt. 120(2), 703-711 (1966).)

Bahadur, K. and Srivastava, V.K.

- 140 Photochemical fixation of nitrogen in a mixture containing citric acid as the source of carbon and aromatic hydrocarbons anthracene fluorene and naphthalene as catalysts. Vijnana Parishad Anusandhan Patrika 9 (II), 75-80 (1966).

Bahadur K & Agrawal KML

129. ¹³⁸
⁽¹⁴¹⁾ Influence of Calcium ions on growth and nitrogen fixation in cultures of nitrogen fixing microorganism no. 121/1 at pH values 6.5, 7.0 and 7.5.
(Italian J. Biochem., 15 (1), 1-10 (1966).

Bahadur, K. Ranganayaki, S. and Srivastava, P.

130. ¹³⁷
⁽¹⁴²⁾ Solar radiation and origin of life.
(Vijnana Parishad Anusandhan Patrika, 10(1), 51-61 (1967).

Bahadur, K. and Ranganayaki, S.

131. ¹³⁸
⁽¹⁴³⁾ New approach to molecular and chemical evolution.
(Vijnana Parishad Anusandhan Patrika, 9(3), ~~197~~ ¹¹⁷⁻ 26, (1966).

132. ¹³⁹
⁽¹⁴⁴⁾ Formation of Jeewanu, the molecular association with Properties of biological order.
(Vijnana Parishad Anusandhan Patrika, 9, ~~177~~ ¹⁷¹⁻⁸² 27 (1966).

Bahadur, K.

133. ¹⁴⁰
⁽¹⁴⁵⁾ Synthesis of Jeewanu, the protocell.
(Zbl. Bakt., 121, (2), 291-319 (1967).

Bahadur, K. and Saxena, I.

134. ¹⁴¹
⁽¹⁴⁶⁾ Abiogenesis leading to biopoesis.
(Trans. Rays. Soc. New South Wales, 101(1), 11-15 (1967).

Bahadur, K. and Verma, M.L.

135. ¹⁴²
⁽¹⁴⁷⁾ Microdetermination of L-Arginine separately and in presence of other amino acids.
(Micro-Chem. J. 14, (4), 547-49 (1969).

Bahadur, K. and Singh, B.B.

136. ¹⁴³
⁽¹⁴⁸⁾ Cracking in Diospyros melanoxylon wood.
(Vijnana Parishad Anusandhan Patrika, 11, (4), 192-194 (1970).

Bahadur, K. and Malviya, A.N.

137. ¹⁴⁴
⁽¹⁴⁹⁾ Studies in Citric acid fermentation. Micopathologia ^{et} Mycologia Applicata. 36, (3-4), 31 (1968).

Bahadur, K. and Srivastava, R.L.

138. ¹⁴⁵
⁽¹⁵²⁾ The study of the oil of Oriza Sativa waste.
(Vijnana Parishad Anusandhan Patrika, 13(1) 25-30 (1970).

150) Bahadur, K. & Malviya AN
The influence of hydrogen ion concentration on the microbial production of citric acid by various *Aspergillus niger* strains. *Mycopathologia et Mycologia Applicata*. 36 (3-4), 359-64 (1968)

151) Bahadur, K & Saxena I
Complexometric estimation of glutamic acid by titration with standard cadmium acetate solution employing 4-(2-Thio30thyl)resorcin, *Microchemical J.*, 18 358-62 (1973)

Bahadur, K. and Ranganayaki, S.

154 ~~139.~~ Photochemical formation of self-sustaining coacervates.
 J. Brit. Interplanetary Soc., 23(12), 813(1970).

Ranganayaki, S., Raina, V. and Bahadur, K.

160 ~~140.~~ Detection of nucleic acid bases in photochemically synthesised self-sustaining coacervates.
 J. Brit. Interplanetary Soc., 25(5), 279-286(1972).

Bahadur, K. and Srivastava, R.L.

153 ~~141.~~ Study of unaponifiable matter of Oriza Sativa Husk Oil.
 Planta medica, 20, (4), 340-343(1971). (1971)

Bahadur, K. and Sen, P.

164 149. Titrimetric determination of Asparatic acid.
 Micro Chem. J. ~~16~~(1971). 18, 694-698(1973)

Bahadur, K. and Billa, S.P.

155 ~~143.~~ Composition of fatty acids in the seeds of Lathyrus sativus.
 Vijnana Parisad Anusandhan Patrika, 11, (4)
 205-209(1968).

156 ~~144.~~ Estimation of -N Oxalyl-X, B-diamino propionic acid in the seeds of Lathyrus sativus.
 Indian J. App. Chem., 33(3), 168-172(1970).

157 ~~145.~~ A comparative study of water soluble reducing substances of some Indian leguminous seed.
 PLMEAA, 20(1), 50-53(1970).

158 ~~146.~~ Study of Lecithin present in the seeds of Lathyrus sativus.
 Vijnana Parisad Anusandhan Patrika, 12 (2),
 69-71(1969).

159 ~~147.~~ Isolation and identification of phospholipid.
 Z. Naturforsch., 26, 1376(1971).

Billa, S.P., Bahadur, K. and Singh, B.B.

161 ~~148.~~ Determination of percentage of fatty acids in a mixture containing three fatty acids.
 All. University Studies, Vol. 3, No. 4 (1971).
 223-6

Bahadur, K. and Sorabji, P.

162 ~~149.~~ Ultraviolet irradiation on nitrogen fixing bacteria and determination of the inhibition constant.
 Zbl. Bakt. Abst. II, 493-497(1970).
 Zbl. Bakt.

Bahadur, K. and Tripathi, P.

166 ~~157.~~ Effect of mannitol, sucrose & glucose on bacterial nitrogen fixation.
 Zbl. Bakt. II Bd 130(3), 486-490(1975).
 17-20

Bahadur, K.

163 Photochemical formation of self-sustaining coacervates. Proc. Natl. Acad. Sci., India 39(B) 4, 455-67 (1973).

Microdeliniration of L-histidine and L-cysteine separately and in presence of other natural amino acids. Analysis 2(2), 126-9 (1973)

165

- (158) see page (17)
159
- (167) 157. Activatory effect of some rare earths on microbial nitrogen transformations.
(Zbl. Bakt II Bd 130, § 486-90 (1975).)
- (168) 161. Nitrogen fixation by microbial cultures with sodium salt of organic acids as carbon source (under print).
(Zbl. Bakt II Bd 130(3), 486-90. (1975))
- (169) 162. Investigation of effect of inorganic and organic nitrogenous compounds in microbial nitrogen fixation with respect to the fixation cycle.
(Zbl. Bakt. (under print). II Bd. 130(3), 490-94 (1975))

K. Bahadur & Usha Jaiswal, U.

- (180) 163. Effect of uranyl acetate on microbial fixation of nitrogen in presence of Lanthanum sulphate.
(Zbl. Bakt. Abt. II Bd. 131(8), 157-162 (1976).)

Bahadur, K., Verma, M.L. & Singh, Y.P.,

- (170) 164. Effect of concentrations of amm. molybdate, diammonium hydrogen phosphate, formaldehyde & minerals in mixture on the synthesis of amino acid, Zeitschrift fur Allg. Mikrobiologie 14(2) 87-91 (1974).

Bahadur, K. & Sharma, S.

- (171) 165. The composition of the oil extracted from the roots of Lunaea nudicaulis.
(Proc. Natl. Acad. Sci. India, 44(A) IV, 10 (1974).)

Bahadur, K. and Sen, P. & Ranganayaki S.

- (172) 157. Titrimetric estimation of Cystein alone & in the presence of other amino acids.
(Talanta, Vol. 21, no. 970-972, (1974).)

- (173) 167. Comparative study of abiogenesis of cysteine and other amino acid catalysed by various amino metal ions. Ze
(Zeitschrift fur Allg. Mikrobiologie 15(3), 143-47 (1975))

Bahadur, K., Ranganayaki, S. & Sen, P.

- (174) 168. Titrimetric microdetermination of L-cystein hydrochloride separately and in the presence of other natural amino acids.
(Sydowia Annales Mycologia Ser. II Vol. XXVI 1-6, (1972).)

Ranganayaki, S. and Srivastava, B.

- (175) 160. Titration of L-cystein hydrochloride with standard Nickel sulphate solution employing 1-(pyridyl 2'-azo)-Naphthol-(2) as indicator.
(Microchemical Journal, 18, 699-702 (1973).)

Bahadur, K. and Saxena, I.

- (177) 170 161. Complexometric estimation of glutamic acid by titration with standard cadmium acetate solution employing 4(2-thiozoly azo) resorcin.
(Microchemical Journal, 18, 358-362 (1973))

Bahadur, K. and Gupta, J.L.

- (176) 171 162. Cytological studies of abiogeneically synthesised Jeewanu, Cell-like microstructures.
(Zbl. fur Bakt. 127, 643-648 (1972).)

Bahadur, K., & Jaiswal, U.

- (178) 172 163. Effect of Uranium on microbial nitrogen fixation.
(Zbl. Bakt. Abt. II 128, 758-763 (1973).)

Bahadur, K.,

- (181) 173 164. Photochemical formation of self sustaining coacervates.
(Zbl. Bakt. Abt. II, 130, 211-218 (1975))

K. Bahadur, O.N. Perti and H.D. Pathak

- (99) 97. Photochemical formation of peptide bonds in aqueous solution.

(Proc. Natl. Acad. Sci., India 30A part (II), 206-220 (1961))
Photosynthesis of peptides in a mixture of glycine and tryptophane and glycine and valine separately and in combination in presence of sucrose in the mixture. Ind. J. Appl. Chem. 24, 90-6 (1961)

Bahadur, K., & U. Jaiswal, U.

- (179) 180 124 165. Effect of selenium and molybdenum on microbial fixation of nitrogen. Vijnana Parishad Anusandhana Patrika, Allahabad, India, Vol. 17, No. (2), April 1974, pp 121 to 130.
(20-30 (1974))

Bahadur, K., & U. Jaiswal, U.

- (181) 175 166. Effect of uranyl acetate on microbial fixation of nitrogen in presence of lanthanum sulphate. Zentralblatte fur bakteriologie, Jena, Germany, Abt. II, Bd. 131, S. 157-162 (1976).

Bahadur, K., S. Ranganayaki, Y.P. Singh and S. Kumar, S.

- (182) 176 167. Study of the response to antibiotics in Jeewanu, the self-sustaining coacervates, capable of growth, multiplication and metabolic activity.
(Revista do Instituto de Antibioticos, Recife, 15(1/2) 33-36 dez. (1975).)

Ranganayaki, S., Bharti Srivastava and K. Bahadur, K.

- (183) 177 168. Synthesis of Amino Acids and Peptides in sterilized aqueous mixtures under different conditions.
(Proc. Nat. Acad. Sci., India, 47(A), III, 182-188, (1977).)

(197) - Ranganayali, S., Guwain, P. S. & Singh, A. K.

Isolation and study of a pentacyclic triterpene from the roots of *Roylea elegans* wall
J. Sci. Res. Pt. Med. 1 (1), 44 (1979)

Bahadur, K. and Agarwal, K.M.L.

~~169~~ 169. Photochemical fixation of Nitrogen in solutions containing Paraformaldehyde as a source of Carbon in the presence of Catalysts. Journal of Scientific and Industrial Research 21 B, (7) 336-337 (1962).

Bahadur, K.

~~170~~ 170. Photochemical formation of self-sustaining Coacervates. Proc. Indian Natl. Acad. 39, B, (4), 455-467 (1973).

Bahadur, K., and Sen, P.

~~171~~ 171. Microdetermination of L-Histidine and L-cysteine separately and in the presence of other natural amino acids. Analysis, 2, (2), 126-129 Fevrier (1973).

Bahadur, K., S. Kumar, and P.S. Gusain, P.S.

~~172~~ 172. Effect of Tetracycline on the formation of Nucleic Acid Bases formed in photochemically synthesized micro-structure, called "Jeewanu". Zbl. Bakt. II. Abt. Bd. 132, S. 666-672 (1977).

Bahadur, K. and V. Jyotishmati, V.

~~173~~ 173. Effect of Uranyl and Molybdate Ions on Microbial Fixation of Nitrogen. Zbl. Bakt. Abt. II, Bd. 133 S; 157-162 (1978)

~~174~~ 174. Microbial fixation of Nitrogen in presence of Sodium Tungstate. Zbl. Bakt. II. Abt. Bd. 133, S. 623-627 (1978)

~~175~~ 175. Microbial fixation of Nitrogen in presence of Lanthanum Sulphate with Sodium Molybdate, Zbl. Bakt. II. Abt. Bd. 133, S. 632-637 (1978)

Bahadur, K. and Tripathi, P.

~~176~~ 176. Investigation of Cerium and Yttrium Ions effects on Microbial fixation and determination of inhibition. Zbl. Bakt. II. Abt., Bd. 133, S. 628-631 (1978).

Rao, K.K., Adams, M.W.W., Morris, P., Hall, D.O., Ranganayaki, S. and Bahadur, K.

~~177~~ 177. Biophotolysis of water for H₂ production via Natural and Artificial Catalytic Systems.

Presented at the BASE Symposium, Madurai, India. ~~Dec 1978~~ ^{Eds.} A. Gnanam, S. Krishnamurthy and J. S. Kahn. The McMillan Co. of India, Madras, (1980).

(185) Bahadur, K. & Sen P.

Titration of aspartic acid with mercuric chloride, Microchemical J., 18, 694-8 (1973)

(198) Bahadur, K. & Gaur, N.

Effect of gamma radiation on nitrogen fixation by some nitrogen fixers, Zbl. Bakt. II. Abt., 134, 594-9 (1979)

(199) Ranganayaki, S. & Srivastava M.

Photosynthesis of amino acids. J. Org. Chem., 15(6), 1124 (1978)

202 Role of minerals in the abiogenesis of nucleic acid bases in photochemically synthesized concentrates, J. of Org. Chem., U.S.S.R., 17(9) 1992-5 (1981)

193 The effect of maximum sulphate on the photochemical formation of microstructures with properties of biological order, Zbl. Bakt. II 134, 633-9 (1979)

191 P. Tripathi, ~~V.S.~~ Tripathi^{V.S.} and K. Bahadur^{K.}

191/98 Investigation of effect of α -Naphthylamine and β -Naphthylamine on Organic Acids formation of Self-sustaining Coacervates.
Zbl. Bakt. II. Abt., 134, 198-201 (1979)

193 K. Bahadur^{K.}, ~~D.A.~~ Pradhan^{D.N.}, Jyotishmali^{J.}, V.

193 Effect of tetracycline on the abiogenesis of Sugar.
Vijnana Parishad Anusandhan Patrika, 22(2), pp 107-114 (1979).
Bahadur, K., Jyotishmali V., & Sinastava B.

194 Influence of ammonium thiocyanate on the synthesis of cysteine in the presence of cobalt sulphate, Vijnana Parishad Anusandhan Patrika 21, 185-90 (1978)

196 K. Bahadur^{K.} and D.A. Pradhan^{D.N.}

196 Effect of Chloramphenicol on the formation of amino acids in the synthetic mixtures which formed Jeewanu.
Proc. Nat. Acad. Sci. India, 49(A), III, 165-72 (1979)

195 K. Bahadur^{K.} and S. Kumar^{S.}

195 Effect of formaldehyde on the Abiogenesis of Sugars in the Mixture of Jeewanu.
Nat. Acad. Sci. (Letters) 1 (11), 405-406 (1978)

192 K. Bahadur^{K.} and P. Tripathi^{P.}

192 Investigation of Inorganic and Organic Nitrogenous Compounds on Microbial Nitrogen fixation with Respect to the Fixation Cycle.
Zbl. Bakt. Abt. II, Bd. 133 S. 154-156 (1978)

192 Bahadur^{K.}, Ranganayaki^{R.}, Ramesh^{R.}, and Kumar^{S.}

192 Rate of Molybdenum in origin of life
Proc. Natl. Acad. Sci. India 49(A), II, (1979)

Bahadur, K., Ranganayahi, S. & others

A Functional Approach to the origin of life Problem

184
~~184~~

~~Krishna Bahadur K., Ranganayahi S., Jair Falsome,~~
~~and Adolf Smith, A.E.~~

208

Natl. Acad. Sci. India, Golden Jubilee Commemoration
Volume, 1980, 181-190 (1980)

Ranganayahi, S., Bahadur K., & Srivastava B.
Synthesis of phospholipids in microstructures,

Prepared by the interaction of ammonium thiocya-
nate, minerals, calcium acetate, potassium dehydrogen
phosphate, and formaldehyde. ←

185
~~185~~

209

~~S. Ranganayahi S., Bhardi Srivastava B. and K. Bahadur~~

~~Zbl. Bakt~~, ~~135 (2)~~, ~~265-269~~ (1980)

K. Bahadur Kanel & S. Kumar, S

Effect of formaldehyde on the abiogenesis of
nucleic acid bases in the irradiated mixture of
Jeevanu, the protocells.

J. and Proc. Royal Soc., New South Wales, 112,

186
~~186~~

205

111-~~113~~ (1979)

Effect of tetracycline on the photochemical formation of amino acids in the abiogenic
mixtures of Jeevanu, Revista de Instituto de Antibioticos, Recife, 20 1/2 dez. 105-10 (1981)

K. Bahadur, S. Kumar, S and Jyotishmati, V.

187
~~187~~

207

Effect of tetracycline on photochemical synthesis
of sugar in the mixture of Jeevanu,

Vijnanakijana Parisad Anusandhan Patrika, 23, (2)

141-~~147~~ (1980)

Proc. Natl. Acad. Sci. India
49(A) I, 31-6 (1979)

The abiogenesis of sugar

- Bahadur K. & Pradhan D. N.
Effect of chloroamphenicol on

204

210

Ranganayali, S., Singh, R. & Singh, A.K.

The chemical examination of bark of *Averrhoa carambola*, Proc. Natl. Acad. Sci, India
50 (A) II, 61-3 (1980)

188.

Krishna Bahadur, S. Ranganayaki, Surendra

Murthy M.S.V.B.S.N. Murthy & Vinod Kumar Gupta, V.K.

189. ~~190~~
~~190~~ Detection of the presence of ferredoxin-like compounds in Jeewanu, the proto cell.

(211)

Proc. Nat. Acad. Sci., India, 50(B) II (~~1980~~)
114-118. (1980)

~~189~~
~~191~~

Krishna Bahadur, S. Ranganayaki, Surendra

Singh S, Sarita Srivastava S, Pradeep Verma P.K.

& Vinod Gupta, V.K.

(212)

study of the influence of Sulphate, Sulphide, thiosulphate and Bi. Sulphite on the formation of microstructures in sterilised aqueous mixtures.

Proc. Nat. Acad. Sci., India, 50(B) IV (~~1980~~)
191-197. (1980)

198.

Bahadur, K., Ranganayaki, S. and Maurya, H.K.

2

The effect of magnesium Sulphate on the photochemical formation of microstructures with properties of biological order.

Zbl. Bakt. II. Abt. 134, 633-639 (1979)

191. ~~199~~

Ranganayaki, S., Bahadur, K and Chandra Mohan, C.

(213)

Effect of Osmium on microbial fixation of nitrogen.

Proc. Nat. Acad. Sci. India (~~1980~~), 50(A) III,
184-188. (1980)

192. Ranganayaki, S., Bahadur, K. & Chandra Mohan

Effect of manganese sulphate on microbial fixation of nitrogen.

~~200~~
214

~~Under print in~~ Zbl. Bakt. (~~1980~~) ~~136(4) 348-50~~²⁰¹⁻⁴
(1981)

193. ~~201~~
201 Ranganayaki, S., Bahadur, K. and Chandra Mohan, C.

215 Influence of nickel sulphate on microbial fixation of nitrogen.

~~Proc. Natl. Acad. Sci. India 50(2), 61-63 (1980)~~
~~Under print Zbl Bakt. (~~1980~~)~~
Zbl. Bakt. II Abt. 136, 348-51 (1981)

194. ~~202~~
202 Ranganayaki, S., Bahadur, K. and Chandra Mohan.

216 Effect of cupric sulphate on microbial fixation of nitrogen
~~Under print~~ Zbl. Bakt. ~~(1981)~~ 136(3) 201-4 (1981)

195. ~~203~~
203 Ranganayaki, S., Bahadur, K. and Chandra Mohan

217 Microbial fixation of nitrogen in presence of Lanthanum sulphate
Z. Allg. Mikrobiol.
~~Under print in~~ Zbl Bakt. (~~1981~~) 21(4) 329-32 (1981)

196. ~~206~~
206 A. Smith A.E., Folsome and K. Bahadur K.

Carbon dioxide reduction and nitrogenase activity in organo-molybdenum microstructures.

Experientia 37, 357 (1981). Birkhauser Verlag

Basel (Schweiz)

S. Ranganayaki, K. Bahadur & Mohan C.

218 ~~207~~
207 effect of sodium molybdate on microbial fixation of nitrogen
Z. Allg. Mikrobiol. 21(607) (1981)

Ranganayathi S, Babadar, K, Verma, P.K., Sinha, P.M. & Bhattacharya, S.

Optimum exposure necessary for the formation of high mineral Zeewann with maximum efficiency of photolytic splitting of water and effect of ageing of Zeewann on their water splitting ability. Proc. Natl. Acad. Sci. India 53(A), 319-31 (1983)

~~218~~
(1981) Microbial fixation of nitrogen in presence of
Cobaltous chloride.

219 Bahadr, K., Ranganayaki, S. and Mohan, C.
Zbl. Bakt., 136, (2), 355-58 (1981)

~~220~~
(198) Photochemical fixation of Carbon dioxide by
Jeevanu, the Prokaryotes,

223 S. Ranganayaki, Bahadr, K. and Sajal Kumar
J. Brit. Interplanetary Soc., 34, 251-254 (1981)

(199) Effect of Ni and Cd on Biogas Production from
Cowdung.

224 S. Ranganayaki, Bahadr, K., Singhal, O.P., Mohan, C.
and Tripathi R.P.

Vij. Anusand Anusandhan Patrika, 24, (4),
383-388 (1981)

(200) Effect of the Parental ~~by~~ Environmental
Medium on Photoolytic Decomposition of Water by
1:2:1:1 Jeevanu, the Primitive Autotroph.

225 S. Ranganayaki, Bahadr, K. and Gupta, V.K.
Proc. Nat. Acad. Sci. India, 51A, II, 231-240 (1981)

(208) Isolation and study of the pigments
of Clitoria ternatea

221 Bahadr, K., Ranganayaki, S., Kumar, S. & Krishna, A.
J. In. Chem. Soc. LVI, (10), 1037-38 (1979)

222 Study of the effect of chloroamphenicol on the photochemical
formation of self-sustaining coacervates in presence
of low concentrations of biological minerals. Proc. Royal
Soc. of N. S. Wales 114 (1), 19-22 (1981)

splitting of water molecules by sunlight in presence of organo-metallochromes microstructures and utilization of hydrogen for fixation of nitrogen, Proc. Natl. Acad. Sci. India 52(A), III, 1982

221 Bahadur K. & Srivastava K.
Study of the effect of sodium chloride on the cellulose hydrolysis by microorganisms isolated from the intestine of *Termes* sp.
Proc. Natl. Acad. Sci. India 51(A), 9-18 (1981)
202 Bahadur, K., Ranganayaki, S., Singh, P. X. P. and Kumar S. 1975, *Revista do Instituto de Antibióticos, Recife*, 15N, 1/2 doz, 33-36

229 K. Bahadur et al. 7th International Conf. of ISSOL, Mainz, 15 July 1983.

Synthesis of Jeevanu, the protocells and Study of their functional properties namely the ability to split water in the sun-light and fix molecular nitrogen and carbon-dioxide, 7th International Conf. on Study of Origin of life, Mainz, July 15, (1983)

204 K. Bahadur, S. Ranganayaki, B. Srivastava, Pratima Verma, Sajal Kumar, P. M. Sinha, P. M.

231 Proc. Nat. Acad. Sci. Studies of photochemical decomposition of water and fixation of nitrogen and Carbon dioxide by photochemical formed Jeevanu. Proc. Nat. Acad. Sci. India 52(A), III, 1982.

205 218 228 K. Bahadur and S. Ranganayaki Functional Approach to the problem of origin of life. J. Ind. Chem. Soc., 59(4), 400 (1982)

229 232 Bahadur, K., Verma, M., Srivastava, S., Murty, M. S. V. B. S. N. & Gupta V. K. Study of the biological matrix Proc. Natl. Acad. Sci. India 50(A), 89-92 (1980) Proc. Natl. Acad. Sci. India 51(A), 16.

234 Effect of antibiotics on the cytological study of nucleic-acid-like material in photochemically formed Jeewanu the protocell. Revisto do Instituto de Antibioticos, Recife 20(1/2) dez. 91-7 (1981)

235 Effect of chloroamphenicol on the biogenesis of sugar in sterilised aqueous mixtures, Revisto do Instituto de Antibioticos, Recife 20(1/2) dez. 99-104 (1981)

238 Renewable source of energy, renewal of the photolytic splitting of water by organo-molybdenum microstructures 1:2:1:1 J (A) 4 Ca 24 after a dark phase. Vijnana Parishad Anusandhan Patrika 27(1), 69-80 (1984)

233 Bahadur, K. & Verma P. K.,
 236 Histochemical study of the lipid-like material in photochemically formed Jeewanu, the protocell with formaldehyde partially replaced by other organic sources
 J. Brit. Interplanetary Soc. 34(3), 100-2, (1981)

LIST OF PUBLICATIONS OF PROF. K. BAHADUR & DR. S. RANGANAYAKI (last 5 years)

1. Effect of biological mineral on the formation and cytology of Jeewanu, the microstructures; Ranganayaki, S. Bahadur, K. & Srivastava, S. : Proc. Natl. Acad. Sci., India. 54A, III, 279-85 (1984). 239
2. Histochemical detection of acid phosphatase-like activity in Jeewanu, the abiogenically formed cell-like molecular association; Bahadur, K., & Gupta, V.K. : Perspectives of Cytology and Genetics, 4, 205-208 (1984). 240
3. Study of the facultative nature of photolytic splitting of water by Jeewanu, "The Protocells"; Bahadur, K., Ranganayaki, S., Singh, S.J. & Agrawal, S.L.: Proc. Natl. Acad. Sci., India. 55A (I), 1-6, (1985). 241
4. Effect of mineral solution on photochemical splitting of water by Jeewanu; Bahadur, K., Ranganayaki, S. & Singh, S.J. : Vijnana Parishad Anusandhan Patrika. 28(2), 203-9, (1985). 243
5. Photochemical fixation of nitrogen by Jeewanu 'The Protocells'; Bahadur, K., Ranganayaki, S., Kumar, S., Srivastava, S.R., Agrawal, S.L. & Mehta, R.: Proc. Natl. Acad. Sci., India. 55A, 196-203, (1985). 244
6. Splitting of water, reduction of inorganic carbon and fixation of nitrogen by ilmenite in sunlight; Bahadur, K. Ranganayaki, S., Verma, P., Sinha, P.M. & Kumar, S. : Phillipines J. of Sci., 115(I), 55-64 (1986). 245
- Origin and evolution of biological organisation; Bahadur, K., Ranganayaki, S. & Bahadur, M.; J. Origin of Life, U.S.A., 16, (3/4), 345, (1986). 246
- Relationship between crystal and Jeewanu; Bahadur, K., Ranganayaki, S., Bahadur, M. & Kharbanda, M.: J. Origin of Life, U.S.A., 16(3/4), 351 (1986). 247

242 Bahadur, K., Ranganayaki S., Verma P & Kumar S
 Dissociation of water, reduction of inorganic carbon and fixation of nitrogen by ilmenite in sunlight. Phil. J. of Sci. 113 (3-4), 215-24 (1984).

Baloch, K, Rangayahi, S, Verma P, Sinha PM & Kumar S.

(236) - Photochemical dissociation of water, fixation of nitrogen and reduction of inorganic carbon to organic carbon by hydroxyl apatite, Phil. J. of Sci. , 109(3-4), 83-6 (1980)

(237) - Photochemical dissociation of water, reduction of inorganic carbon and fixation of nitrogen by apatite, Phil. J. of Sci. 110(1-2), 33 (1981)

248. 9. Photochemical splitting of water by Jeewanu; Ranganayaki, S Bahadur, K. & Agrawal, V.K.; Proc. Natl. Acad. Sci., India, 56A, (II), 111-16 (1986).

249. 10. Photoreduction of carbon and nitrogen by organo-molybdenum microstructures; Bahadur, K., Ranganayaki, S., Sinha, P.M. & Kumar, S.; Proc. Natl. Acad. Sci., India, 56A (I), 35-9, (1986).

250. 11. Photochemical dissociation of water by abiogenic photoautotrophs; Bahadur, K., Ranganayaki, S., Mamta, Bahadur, M., Srivastav, S. & Ratan, R.; Proc. Natl Acad. Sci., India, 56A(IV), 306-13, (1986).

251. 12. Effect of titanium on the photochemical splitting of water by organo-molybdenum microstructures under oxygenic and anoxygenic conditions; Bahadur, K., Ranganayaki, S. & Roy, S.; Proc. Natl. Acad. Sci., India 56A(II), 209-14 (1986).

252. 13. Photochemical fixation of nitrogen by primitive autotrophs; Ranganayaki, S., Bahadur, K., Mamta & Bahadur, M.; Proc. Natl. Acad. Sci., India 57A(II), 130-35 (1987).

253. 14. Thermal effect on gas exchange by photoautotrophs; Ranganayaki, S., Bahadur, K., Mamta & Gautam, G.R.; Natl. Acad. Sci., India (Letters) : 10(8), 283-6 (1987).

254. 15. Effect of sodium molybdate on microbial fixation of nitrogen; Bahadur, K., & Shukla, G.; Proc. Natl. Acad. Sci., India, 57A(I), 25-8, (1987).

255. 16. Mechanism of photolytic splitting of water, fixation of nitrogen and loss of nitrogen due to the presence of nitrogenase-like catalytic material in the organo-molybdenum microstructures at different pH in phosphate buffer under oxygenic and anoxygenic conditions; Bahadur, K., Ranganayaki, S., Srivastava, S.R. & Bahadur, M.; Proc. Natl. Acad. Sci., India, 57A(IV), 491-4, (1987).

- 256 17. Effect of continuous and intermittent exposure of aqueous mixture of molybdenum Jeewanu in phosphate buffer of pH 8 under oxygenic and anoxygenic conditions; Bahadur, K., Ranganayaki, S. & Singh, S.J. : Proc.Natl. Acad. Sci., India, 58A(II), 1805-19, (1988).
- 257 18. Jeew utpatti (Yuti pravah aur swayam sangthit tantron ka urja pravah; Bahadur, K. : Vigyan Garima Sindhu, Min. of Education, Govt. of India, 3, 45-50 (1988).
- 258 19. Solar energy induced photochemical synthesis; Bahadur, K., Ranganayaki, S., & Gupta, V.K. : Intl. Conf. on Origin of Life, ISSOL, Prauge, 2, 40 (1989).
- 259 20. Abiosymbiosis or molecular symbiosis, synergistic collaborative processes, an essential earlier stage in Origin of Life; Bahadur, K., Ranganayaki, S., Bahadur, M. Mathur, V. & Gupta, V.K. : Intl. Conf. on Origin of Life, ISSOL, Prauge, 5, 121 (1989).
- 260 21. Microfossils, Biogenic or Abiogenic? Bahadur, K., Ranganayaki, S., Bahadur, M. & Singh, S.J. : Intl. Conf. on Origin of Life, ISSOL, Prauge, 6, 137 (1989).
- 261 22. The energy flow in photochemically formed non-linear systems, Si-Mo Jeewanu is more efficient under the conditions they are auto-organised; Bahadur, K., Ranganayaki, S., Bahadur, M. & Kumar, S. : Intl. Conf. on Origin of Life, ISSOL, Prauge, 4, 99, (1989).
- 262 23. Characteristic non-Brownian motion in the Jeewanu, the model of Protocells; Bahadur, K., Ranganayaki, S., Bahadur, M., Mathur, V. & Gupta, V.K. : Intl. Conf. on Origin of Life, ISSOL, Prauge, 2, 41, (1989).
- 263 24. Photochemical decomposition of water molecules by high mineral Jeewanu, the protocells; Bahadur, K., Varma, P.K. & Singh, S.J. : Adv. Biol. Res. 5(2), 14-20, (1987).
- 264 25. To study the photochemical splitting of water by Jeewanu HMJ-Fe-60 in vacuum; Bahadur, K. & Singh, S.J. : Adv. Biol. Res., 7(2), 25-31, (1989).